MHC-ZX30AV
HCR-ZX30AV

SERVICE MANUAL

Canadian Model
AEP Model
UK Model
E Model
Australian Model

- MHC-ZX30AV is composed of following models.
  As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENT MODEL NAME FOR MHC-ZX30AV

	MHC-ZX30AV	
COMPACT DISC DECK RECEIVER SYSTEM	HCD-ZX30AV	
FRONT SPEAKER SYSTEM	SS-ZX30AV (EXCEPT)	SS-ZX30AVW (E)
CENTER SPEAKER SYSTEM	SS-CT170	
REAR SPEAKER SYSTEM	SS-RS170P	

HCR-ZX30AV is composed of HCD-ZX30AV, SS-CT170 and SS-RS170P.

•Abbreviation
MY : Malaysia model
G : German model
SP : Singapore model
AED :North Europian model
KR : Korea model
IA : Indonesia model
MX : Mexican model
TH : Thai model
AR : Argentine model
EA : Saudi Arabia model

SPECIFICATIONS

General

Power requirements
Canadian model: 120 V AC, 60 Hz
European model: 230 V AC, 50/60 Hz
Australian model: 230-240 V AC, 50/60 Hz
Mexican model: 120 V AC, 60 Hz
Thai model: 220 V AC, 50/60 Hz
Other models: 120 V, 220 V or 230 - 240 V AC, 50/60Hz Adjustable with voltage selector.

Power Consumption
Canadian model: 200 VA
European models: 200 watts
Other models: 210 watts

Dimensions (w/h/d)
Approx. 250 x 375 x 395 mm

Mass
Canadian model: Approx. 12.5kg
European models: Approx. 12.5kg
Other models: Approx. 13.0kg

Supplied accessories

AM loop antenna (1)
FM lead antenna (1)
Remote Commander (1)
Batteries (2)
Speaker cords (5)
Front speaker pads (8)

Design and specifications are subject to change without notice.

PARTS LIST

Ref No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-418-863-11	REMOTE COMMANDER (RM-SR130)	
	1-501-374-11	ANTENNA, LOOP	
	1-501-804-11	ANTENNA (FM)(CND, UK, AEP, CIS, G, AED, CIS)	
	1-501-659-41	ANTENNA (FM)(E, EA, SP, MY, TH, KR, MX, AR, AUS)	
	4-210-254-01	CUSION FOOT	
	4-227-889-11	MANUAL, INSTRUCTION (ENGLISH) (CND, UK, AEP, CIS, E, EA, SP, MY, MX, AR, AUS)	
	4-227-889-21	MANUAL, INSTRUCTION (FRENCH)(CND, EA)	
	4-227-889-31	MANUAL, INSTRUCTION (SPANISH)(MX, AR)	
	4-227-889-41	MANUAL, INSTRUCTION (FRENCH, SPANISH)(AEP, E, SP, MY)	
	4-227-889-51	MANUAL, INSTRUCTION (GERMAN)(AEP, G)	
	4-227-889-61	MANUAL, INSTRUCTION (DUTCH, PORTUGUESE, ITALIAN)(AEP)	
	4-227-889-71	MANUAL, INSTRUCTION (SWEDISH, DANISH, FINNISH)(AED)	
	4-227-889-81	MANUAL, INSTRUCTION (CHINESE)(SP, MY)	
	4-227-889-91	MANUAL, INSTRUCTION (ARABIC)(EA)	
	4-227-890-11	MANUAL, INSTRUCTION (POLISH, RUSSIAN)(CIS)	
	4-227-890-21	MANUAL, INSTRUCTION (TURKISH)(CIS)	
	4-227-890-31	MANUAL, INSTRUCTION (GREEK)(CIS)	
	4-227-890-41	MANUAL, INSTRUCTION (KOREAN)(KR)	
	4-227-890-51	MANUAL, INSTRUCTION (ENGLISH, THAI)(TH)	
	4-981-643-41	COVER,BATTERY (FOR RM-SR130)	

MINI Hi-Fi COMPONENT SYSTEM

SONY®

9-929-224-11

Sony Corporation
Home Audio Division Company

2000D1674-1
Printed in Japan ©2000.4
Published by Quality Assurance Dept.

HCD-ZX30AV

SERVICE MANUAL

Ver 1.1 2001. 02

Canadian Model
AEP Model
UK Model
E Model
Australian Model

- This set is the Amplifier, CD player, Tape Deck and Tuner section in MHC-ZX30AV.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trade-marks of Dolby Laboratories Licensing Corporation.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM53F-K2BD38
	Base Unit Name	BU-K2BD38
	Optical Pick-up Name	KSM-213DAP
Tape deck Section	Model Name Using Similar Mechanism	HCD-LV100AV
	Tape Transport Mechanism Type	TCM-230AWR12

SPECIFICATIONS

Amplifier section

Canadian model:

Front Speaker:
Continuous RMS power output
100 + 100 watts
(8 ohms at 1 kHz, 10% THD)
Total harmonics distortion
Less than 0.07%
(8 ohms at 1 kHz, 50 W)

Center Speaker:
Continuous RMS power output
40 watts
(8 ohms at 1 kHz, 10% THD)

Rear Speaker:
Continuous RMS power output
40 + 40 watts
(8 ohms at 1 kHz, 10% THD)

European model:

Front Speaker:
DIN power output (rated) 80 + 80 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
100 + 100 watts
(8 ohms at 1 kHz, 10% THD)
Music power output (reference)
170 + 170 watts
(8 ohms at 1 kHz, 10% THD)

Center Speaker:
DIN power output (rated) 30 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
40 watts
(8 ohms at 1 kHz, 10% THD)
Music power output (reference)
60 watts
(8 ohms at 1 kHz, 10% THD)

Rear Speaker:
DIN power output (rated) 30 + 30 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
40 + 40 watts
(8 ohms at 1 kHz, 10% THD)
Music power output (reference)
60 + 60 watts
(8 ohms at 1 kHz, 10% THD)

Other models:
The following measured at AC 120/220/240 V, 50/60 Hz

Front Speaker:
DIN power output (rated) 95 + 95 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
120 + 120 watts
(8 ohms at 1 kHz, 10% THD)

Center Speaker:
DIN power output (rated) 30 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
40 watts
(8 ohms at 1 kHz, 10% THD)

Rear Speaker:
DIN power output (rated) 30 + 30 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
40 + 40 watts
(8 ohms at 1 kHz, 10% THD)

Inputs
VIDEO IN: (phono jacks) voltage 250 mV, impedance 47 kilohms
MD IN: (phono jacks) voltage 450 mV, impedance 47 kilohms
DVD INPUT:
FRONT IN: (phono jacks) voltage 450 mV, impedance 47 kilohms
REAR IN: (phono jacks) voltage 450 mV, impedance 47 kilohms
CENTER IN: (phono jacks) voltage 450 mV, impedance 47 kilohms
WOOFER IN: (phono jacks) voltage 450 mV, impedance 47 kilohms
MIX MIC: (mini jack) sensitivity 1 mV, impedance 10 kilohms
(Asian model only)

— Continued on next page —

MINI Hi-Fi COMPONENT SYSTEM

9-929-234-12
2001B1600-1
© 2001.2

Sony Corporation
Audio Entertainment Group
General Engineering Dept.

SONY®

Outputs

MD OUT:	voltage 250 mV
(phono jacks)	impedance 1 kilohms
PHONES:	accepts headphones of
(stereo mini jack)	8 ohms or more
FRONT SPEAKER:	accepts impedance of 8 to 16 ohms
REAR SPEAKER:	accepts impedance of 8 to 16 ohms
CENTER SPEAKER:	accepts impedance of 8 to 16 ohms
SUPER WOOFER:	Voltage 1 V, impedance 1 kilohms

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser (λ=780nm)
	Emission duration: continuous
Laser output	Max. 44.6 μW*
	*This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Wavelength	780 – 790 nm
Frequency response	2 Hz – 20 kHz (±0.5 dB)
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB

CD OPTICAL DIGITAL OUT
(Square optical connector jack, rear panel)

Wavelength	660 nm
Output Level	–18 dBm

Tape player section

Recording system	4-track 2-channel stereo
Frequency response	40 – 13,000 Hz (±3 dB),
(DOLBY NR OFF)	using Sony TYPE I cassette
	40 – 14,000 Hz (±3 dB),
	using Sony TYPE II cassette

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	
Canadian model:	87.5 – 108.0 MHz (100 kHz step)
Other models:	87.5 – 108.0 MHz (50 kHz step)
Antenna	FM lead antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
Canadian model:	530 – 1,710 kHz
	(with the interval set at 10 kHz)
	531 – 1,710 kHz
	(with the interval set at 9 kHz)
European and Middle Eastern models:	
	531 – 1,602 kHz
	(with the interval set at 9 kHz)
Other models:	531 – 1,602 kHz
	(with the interval set at 9 kHz)
	530 – 1,710 kHz
	(with the interval set at 10 kHz)
Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

General

Power requirements	
Canadian model:	120 V AC, 60 Hz
European model:	230 V AC, 50/60 Hz
Australian model:	230 – 240 V AC, 50/60 Hz
Mexican model:	120 V AC, 60 Hz
Thai model:	220 V AC, 50/60 Hz
Other models:	120 V, 220 V or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	
Canadian model:	200 VA
European model:	200 watts
Other models:	210 watts
Dimensions (w/h/d)	Approx. 250 x 375 x 395 mm
Mass	
Canadian model:	Approx. 12.5 kg
European model:	Approx. 12.5 kg
Other models:	Approx. 13.0 kg
Supplied accessories:	AM loop antenna (1)
	FM lead antenna (1)
	Remote Commander (1)
	Batteries (2)
	Speaker cords (5)
	Front speaker pads (8)

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

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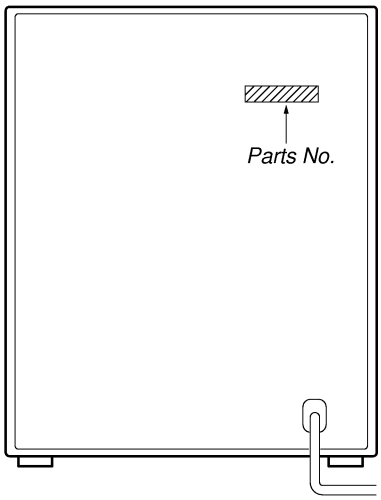
MODEL IDENTIFICATION
— BACK PANEL —



PARTS No.	MODEL
4-227-182-0☐	CND
4-227-182-1☐	AEP,UK,G,AED,CIS
4-227-182-2☐	MY,SP
4-227-182-3☐	E
4-227-182-4☐	EA
4-227-182-5☐	MX
4-227-182-6☐	AUS
4-227-182-7☐	AR
4-227-182-8☐	KR, TH

- Abbreviation
  CND : Canadian model.
  G : German model.
  EA : Saudi Arabia model.
  AUS : Australian model.
  SP : Singapore model.
  MY : Malaysia model.
  AR : Argentine model.
  TH : Thai model.
  AED : North European model.
  MX : Mexican model.
  KR : Korean model.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
   - Keep the temperature of the soldering iron around 270˚C during repairing.
   - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
   - Be careful not to apply force on the conductor when soldering or unsoldering.

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

The following caution label is located inside the unit.

CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL : USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLING.
VORSICHT : UNSICHTBARE LASERSTRAHLUNG. WENN ABDECKUNG GEÖFFNET UND SICHEREITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.
VARO! : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING : OSYNLING LASERSTRÅLING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.
ADVERSEL : USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VIGYAZAT! : A BURKOLAT NYITÁSAKOR LÁTHATATLAN LÉZERSUGÁRVESZÉLY! KERÜLJE A BESUGÁRZÁST!

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

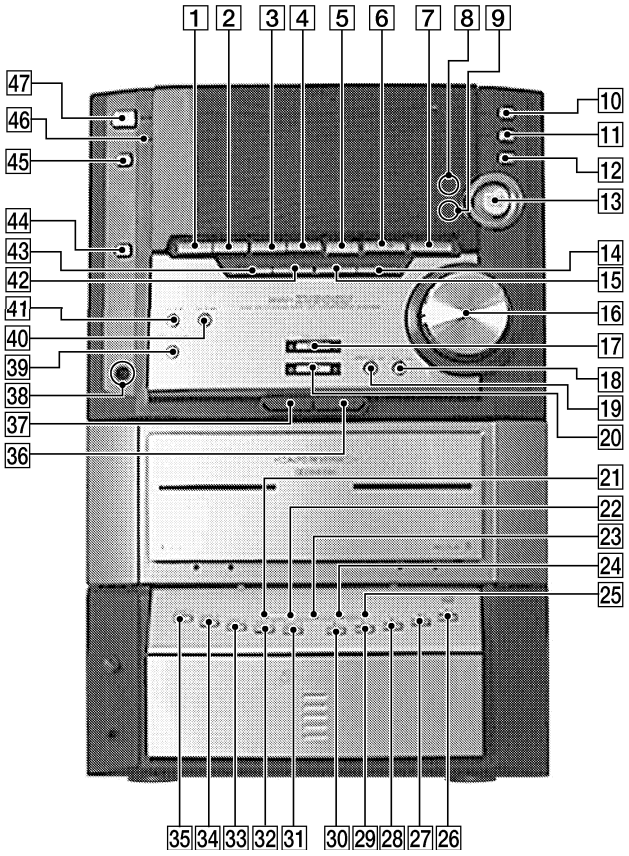
Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

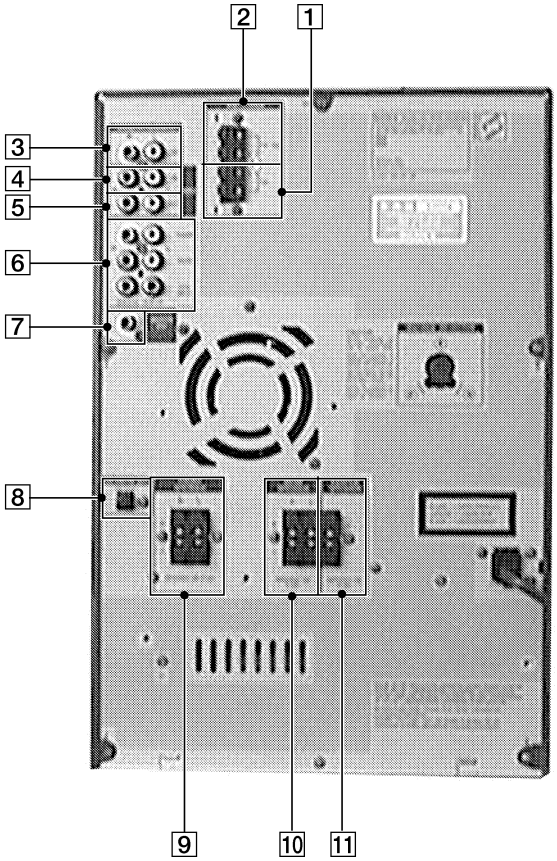
SECTION 1
GENERAL

LOCATION OF CONTROLS
– Front Panel –



1. ◀ button and indicator (TAPE A)
2. ▶ button and indicator (TAPE A)
3. ◀ button and indicator (TAPE B)
4. ▶ button and indicator (TAPE B)
5. ■ button
6. ▶II CD button and indicator
7. TUNER/BAND button
8. SET UP MODE indicator
9. SOUND indicator
10. DSP button
11. V-GROOVE button
12. MODE SELECT button
13. PUSH ENTER button
14. ▶▶ button (TUNER)
15. ◀◀ button (TUNER)
16. VOLUME knob
17. PRO LOGIC button and indicator
18. GROOVE button and indicator
19. GROOVE-EX button and indicator
20. DVD 5.1 CH button and indicator
21. DISC 1 indicator
22. DISC 2 indicator
23. DISC 3 indicator
24. DISC 4 indicator
25. DISC 5 indicator
26. ⏏ indicator (DISC 5)
27. ⏏ indicator (DISC 4)
28. ⏏ indicator (DISC 3)
29. ⏏ indicator (DISC 2)
30. ⏏ indicator (DISC 1)
31. DISC 5 button
32. DISC 4 button
33. DISC 3 button
34. DISC 2 button
35. DISC 1 button
36. ⏏ B button
37. ⏏ A button
38. PHONE jack
39. REC PAUSE/START button and indicator
40. CD SYNC button
41. HI-DUB button
42. I◀◀ button
43. ▶▶I button
44. FUNCTION button
45. DISPLAY button
46. TIMER SELECT indicator
47. I/⏻ button and indicator

– Rear Panel –



1 AM ANTENNA (75 Ω) terminals
2 FM ANTENNA (75 Ω) terminals
3 VIDEO IN jacks
4 MD IN jacks
5 MD OUT jacks
6 DVD IN jacks
7 WOOFER OUT jacks
8 CD DIGITAL OUT connector
9 FRONT SPEAKER terminals
10 REAR SPEAKER terminals
11 CENTER SPEAKER terminals

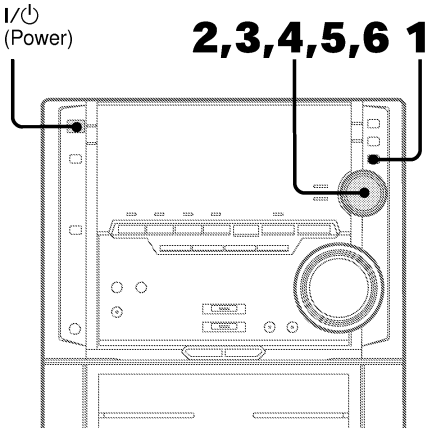
This section is extracted from instruction manual.

Step 3: Setting the time

You must set the time before using the timer functions.

The clock is on a 24-hour system for the European model, and on a 12-hour system for other models.

For illustration purposes, the 24-hour system model is used.

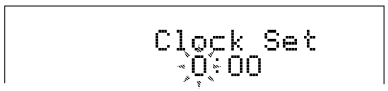


1 Press MODE SELECT when the system is turned off.

"Clock Set ?" appears.
When the system is in the Power Saving Mode, "Clock Set ?" will not appear. Either set Power Saving Mode off, or follow the steps on the following page ("To change the time") after turning the power on.

2 Press PUSH ENTER.

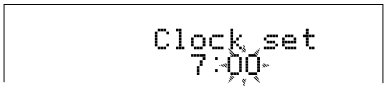
The hour indication flashes.



3 Move the multi stick toward ▲ or ▼ repeatedly to set the hour.

4 Move the multi stick toward ▶.

The minute indication flashes.



5 Move the multi stick toward ▲ or ▼ repeatedly to set the minute.

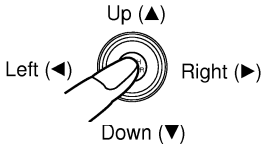
6 Press PUSH ENTER.

To cancel the menu operation

Press MODE SELECT.

Tips

- Refer to the illustration to use the multi stick. Place your finger on the center of the multi stick and move in the direction you want (up/down or left/right shown ▲/▼ or ◀/▶ in this manual).



- If you've made a mistake, start over from step 1.

To change the time

The previous explanation shows you how to set the time while the power is off. To change the time while the power is on, do the following:

1 Press MODE SELECT repeatedly to select "Set Up Mode", then press PUSH ENTER.
2 Move the multi stick toward ◀ or ▶ repeatedly to select "Timer Set Up ?", then press PUSH ENTER.
3 Move the multi stick toward ◀ or ▶ repeatedly to select "Clock Set ?", then press PUSH ENTER.
4 Perform steps 3 through 6 on page 9.

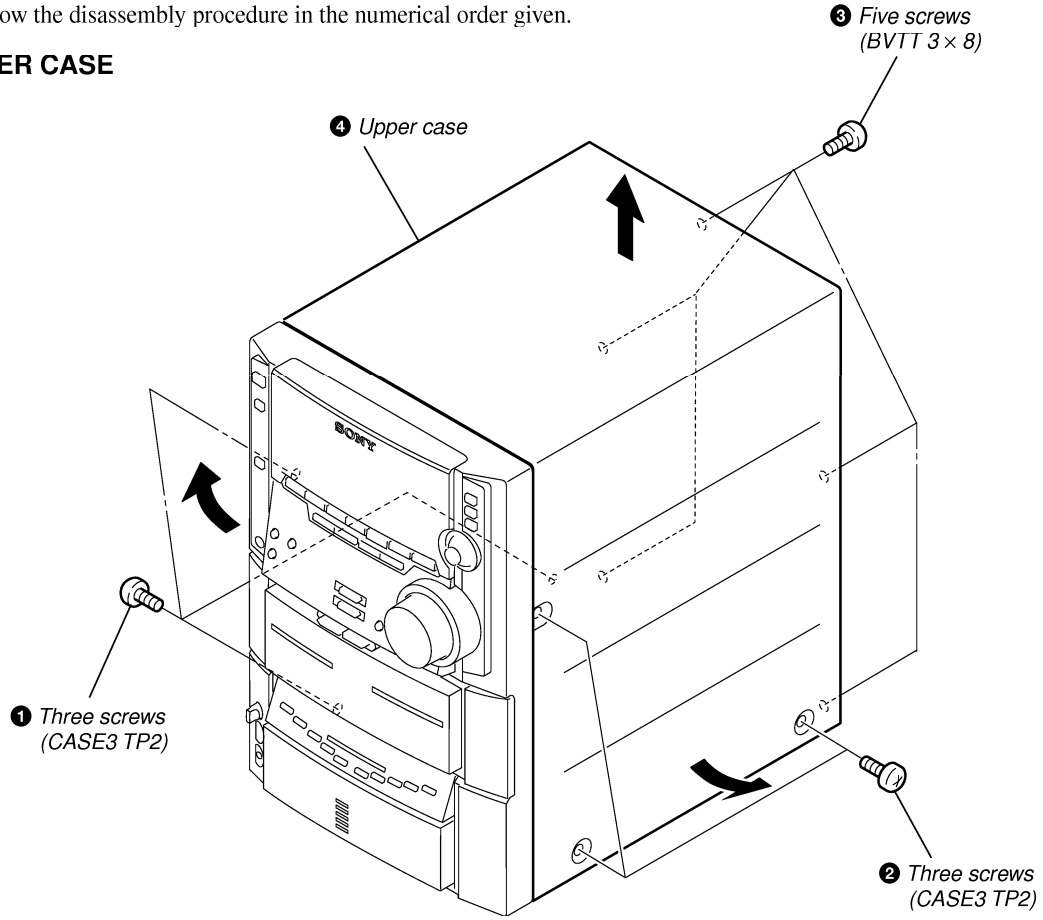
Note

The clock settings are canceled when you disconnect the power cord or if a power failure occurs.

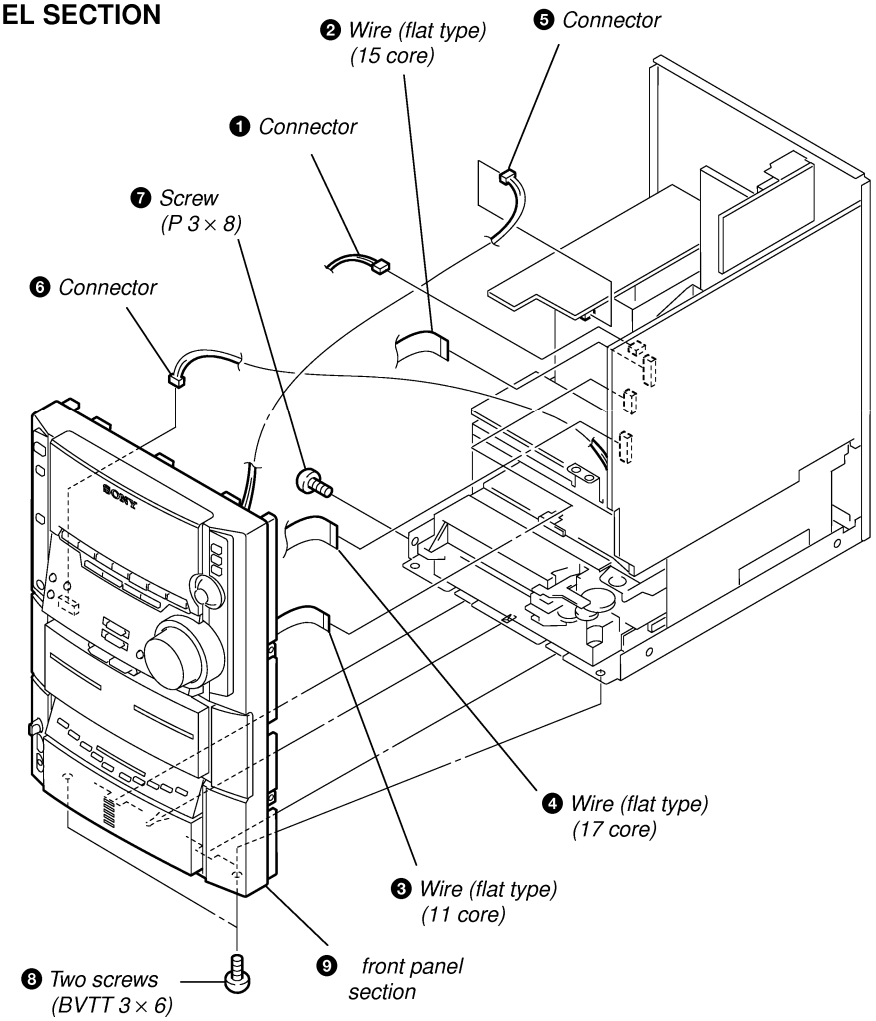
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

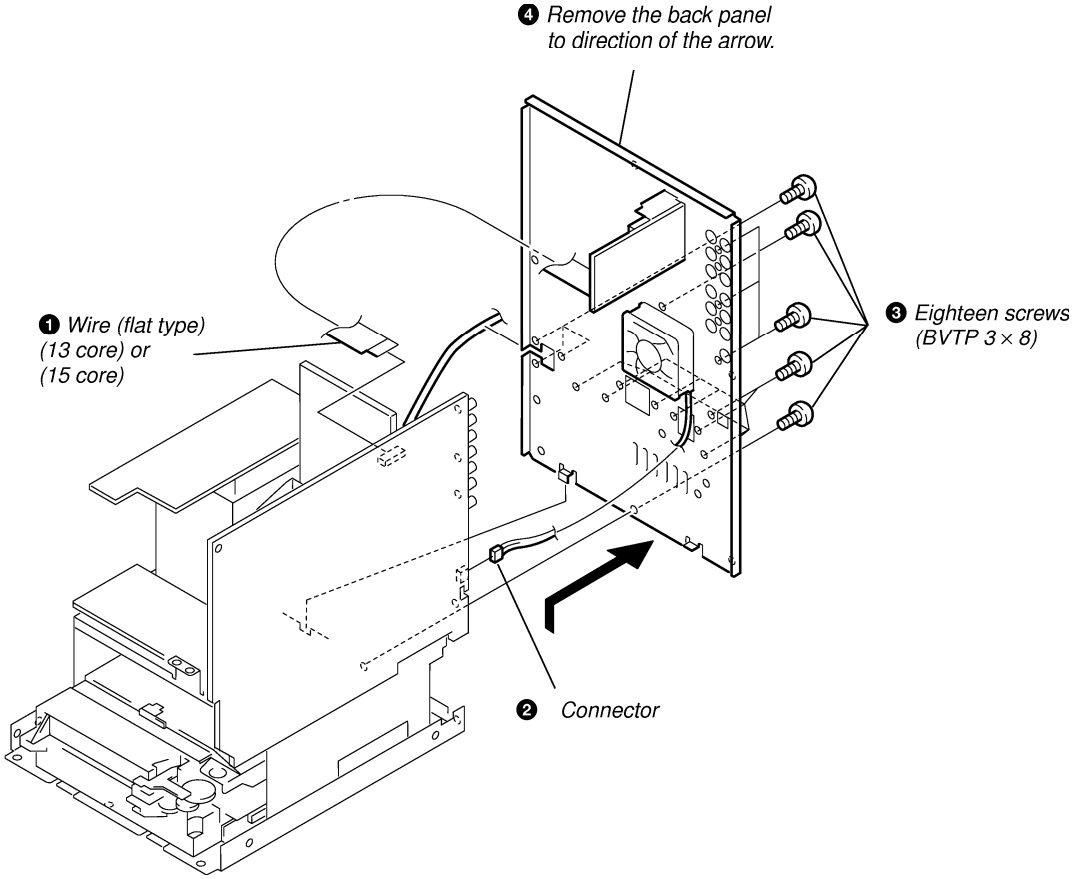
2-1. UPPER CASE



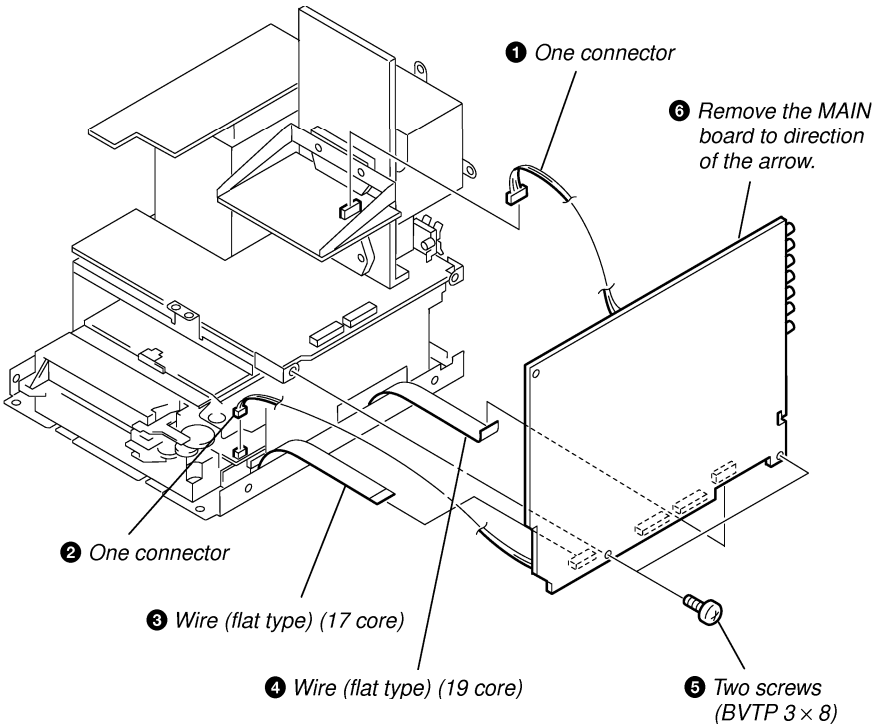
2-2. FRONT PANEL SECTION



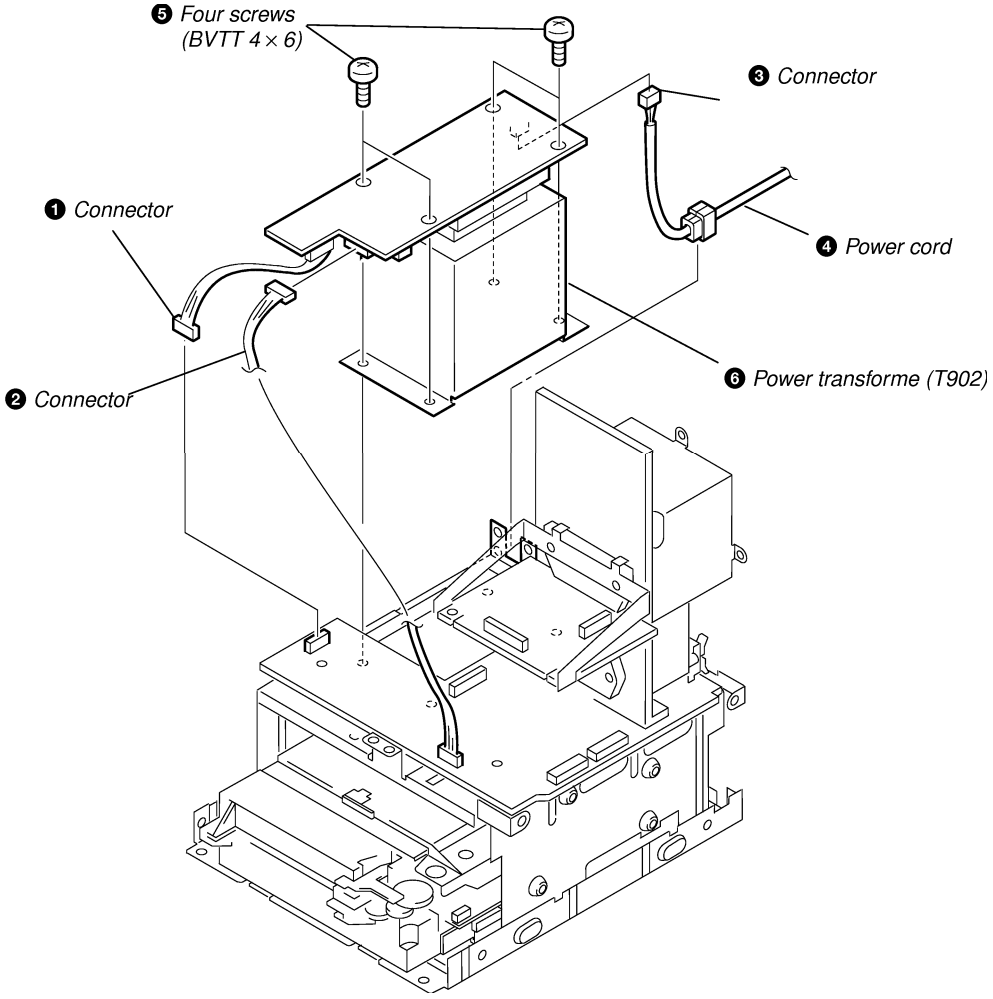
2-3. BACK PANEL SECTION



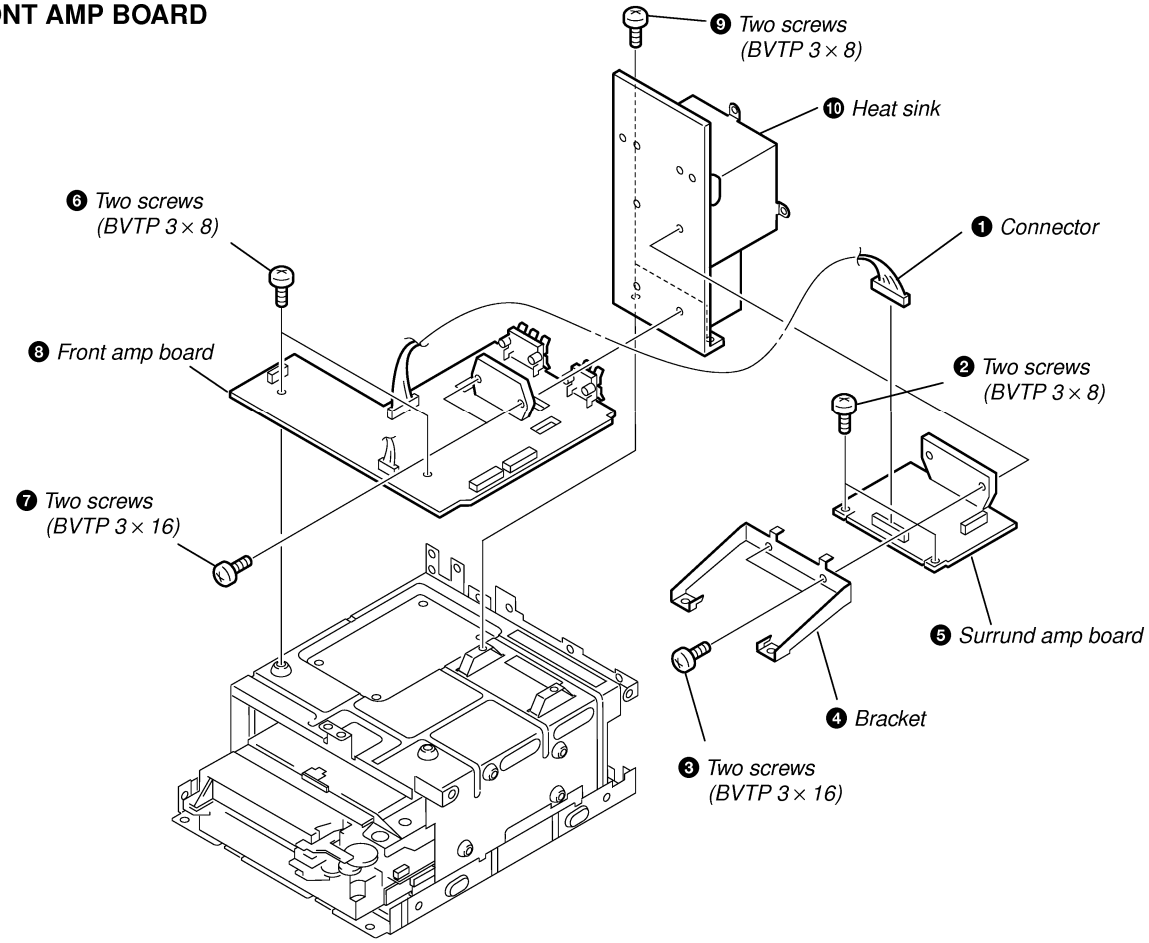
2-4. MAIN BOARD


❶ One connector
❻ Remove the MAIN board to direction of the arrow.
❷ One connector
❸ Wire (flat type) (17 core)
❹ Wire (flat type) (19 core)
❺ Two screws (BVTP 3 × 8)

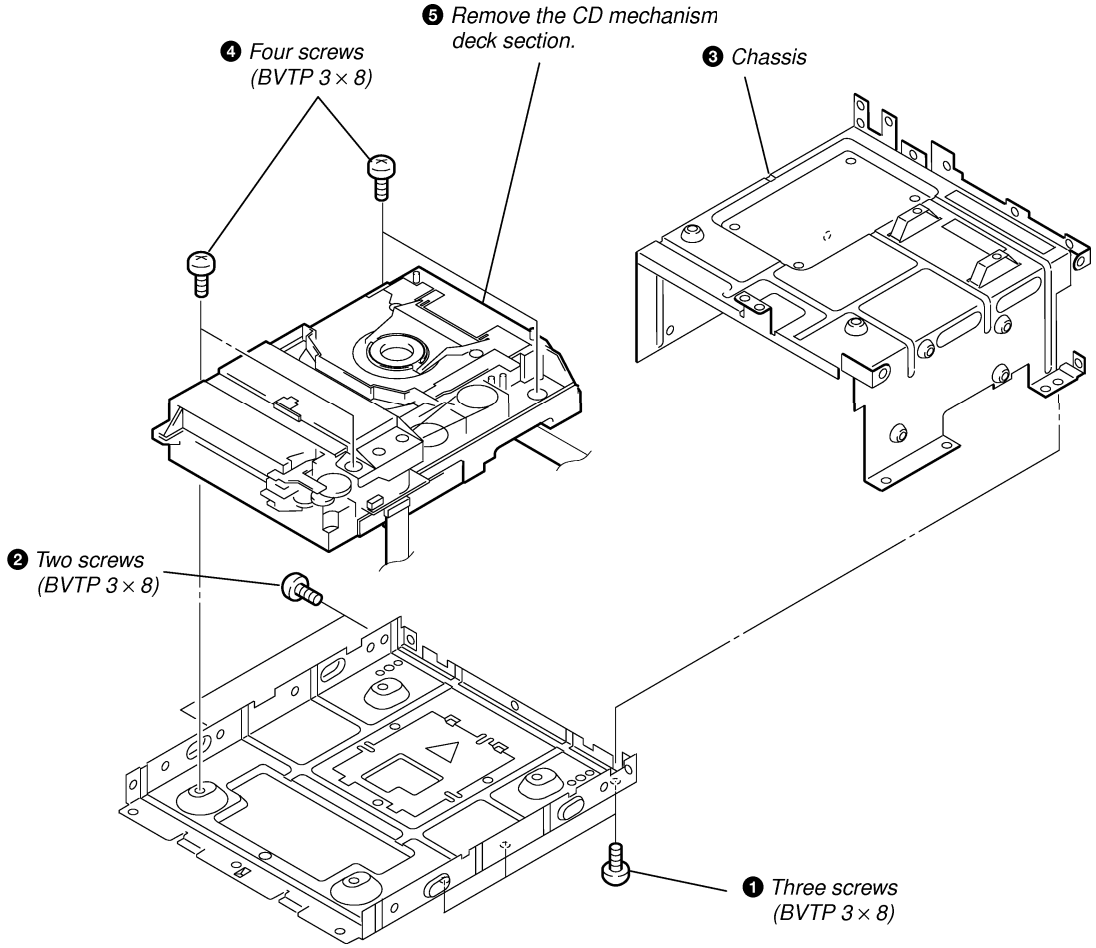
2-5. POWER TRANSFORMER (T902)



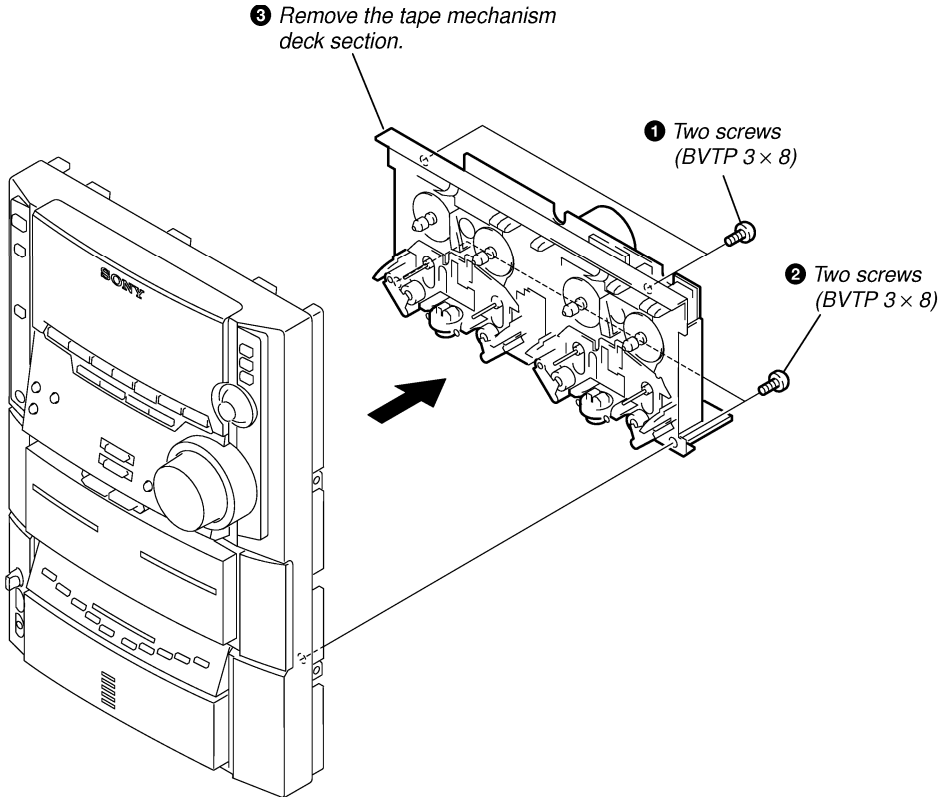
2-6. FRONT AMP BOARD



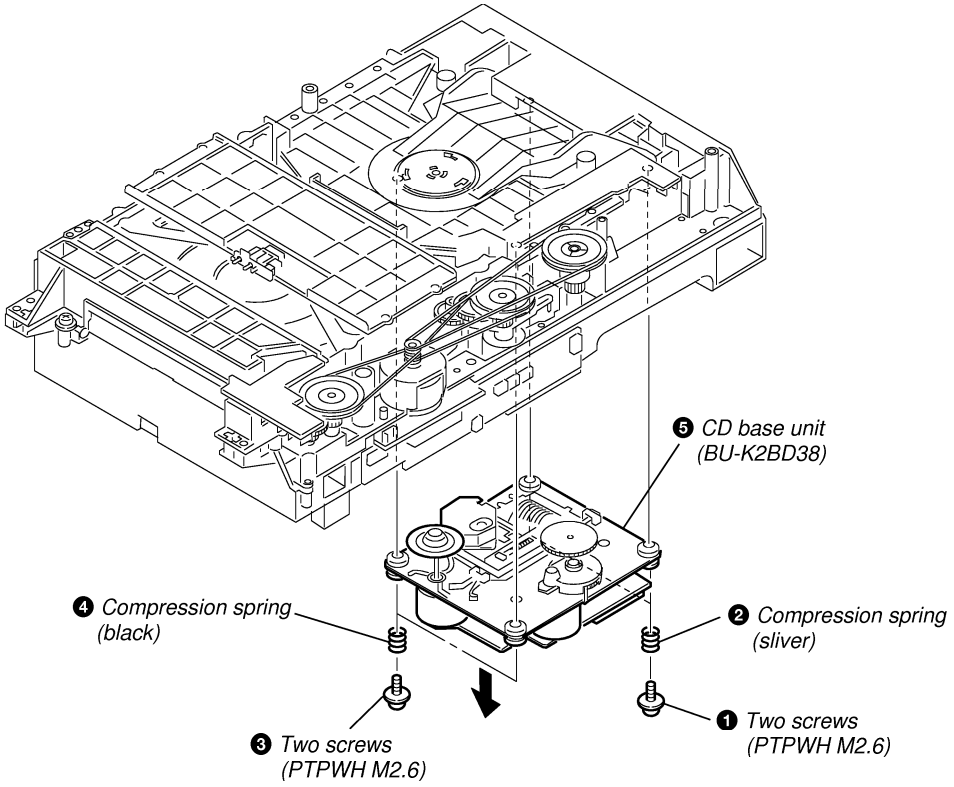
2-7. CD MECHANISM DECK (CDM53F-K2BD38)



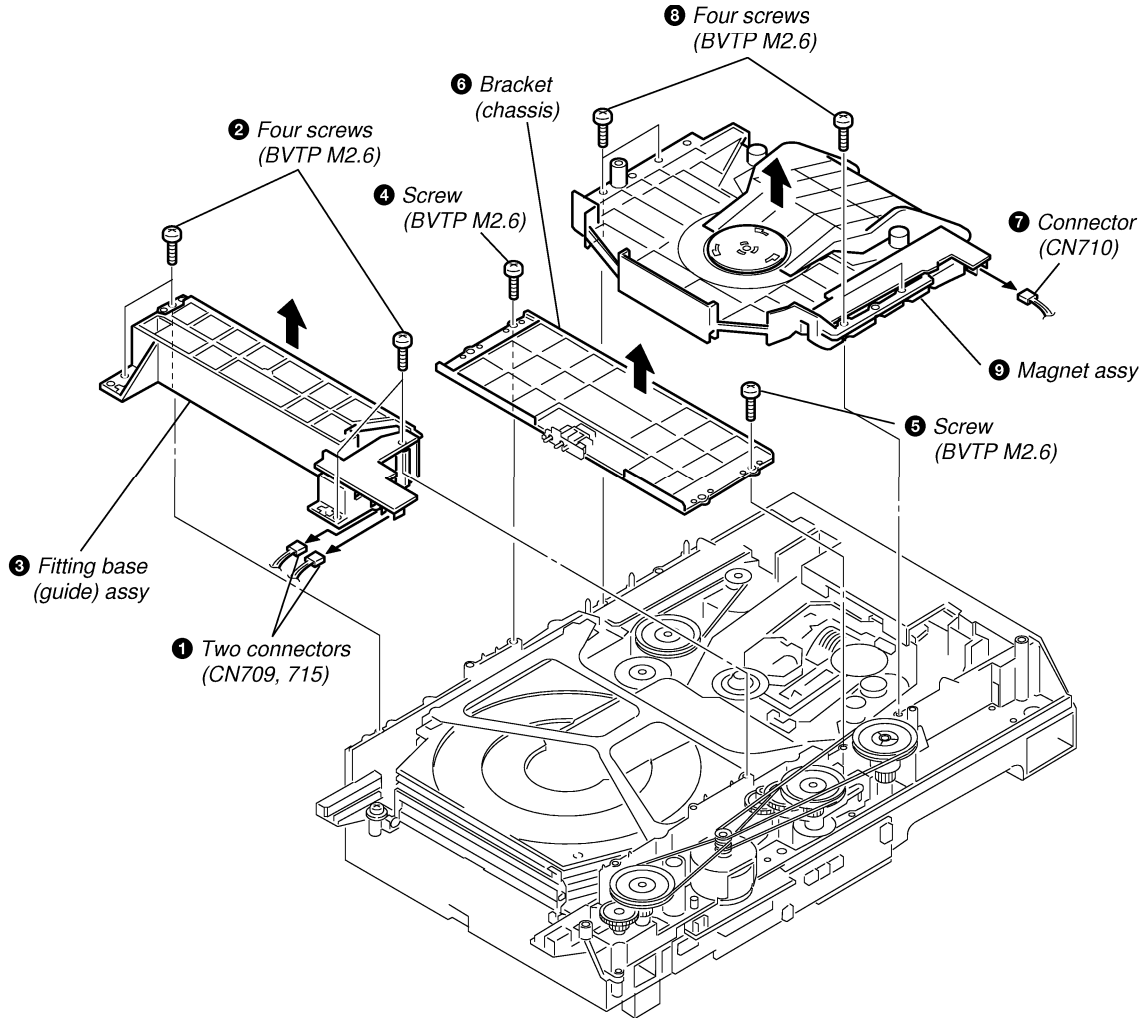
2-8. TAPE MECHANISM DECK (TCM-230AWR12)



2-9. CD BASE UNIT (BU-K2BD38)

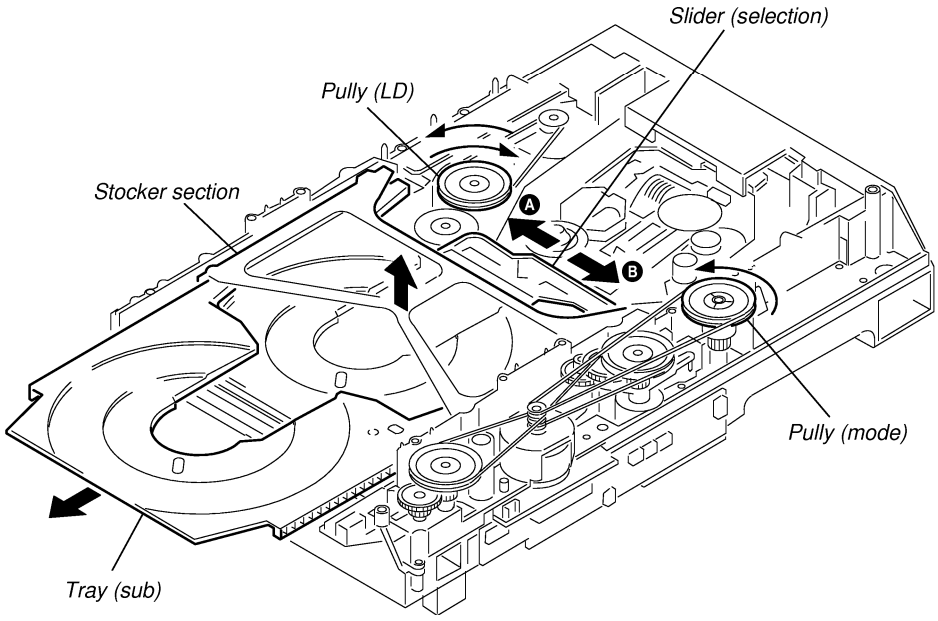


2-10. FITTING BASE (GUIDE) ASSY, BRACKET (CHASSIS) AND MAGNET ASSY



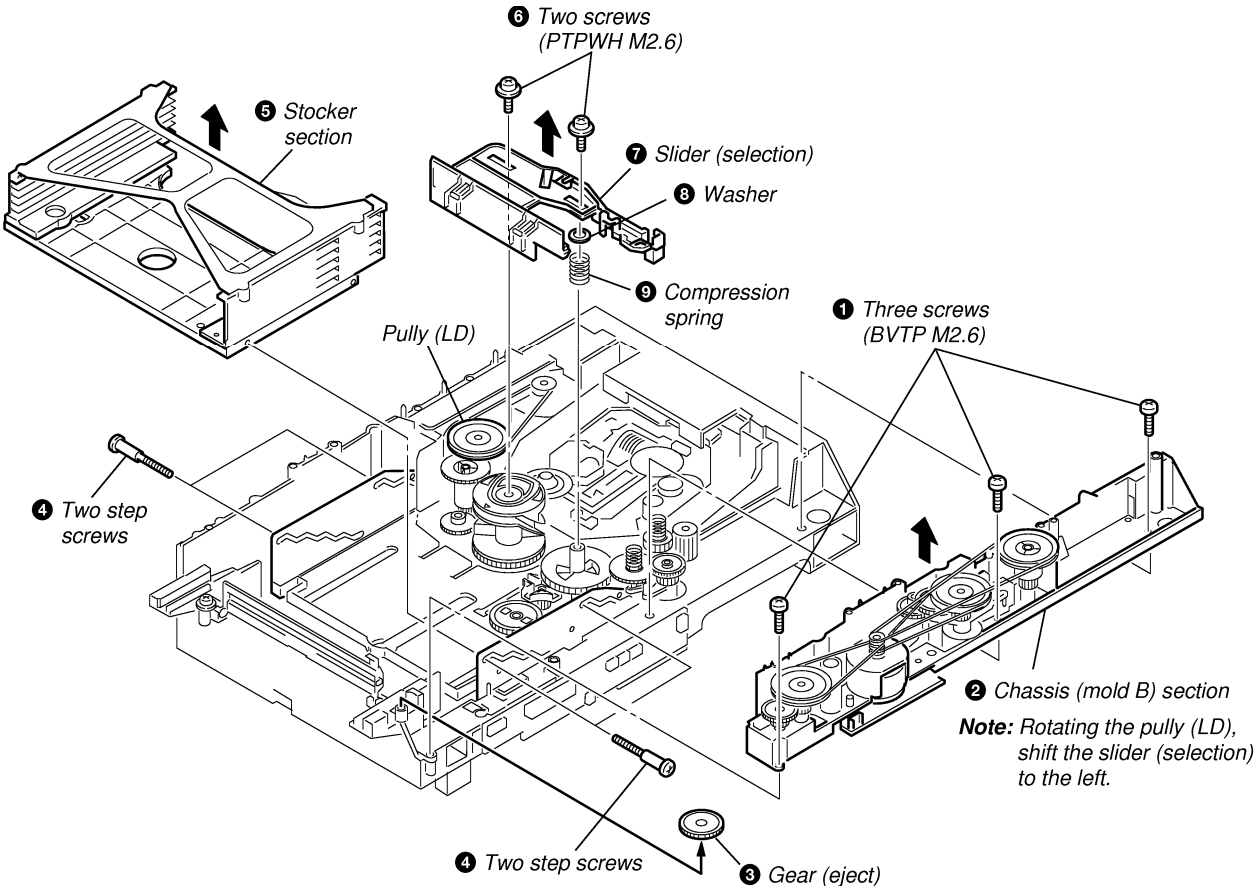
2-11. TRAY (SUB)

❶ *Rotating the pulley (LD), shift the slider (selection) in the arrow Ⓐ direction.*
❷ *Rotating the pulley (mode) in the arrow direction, adjust the tray (sub) to be removed.*
❸ *Rotating the pulley (LD), shift the slider (selection) in the arrow Ⓑ direction.*
❹ *Rotating the pulley (mode) in the arrow direction, remove the tray (sub) to be removed.*

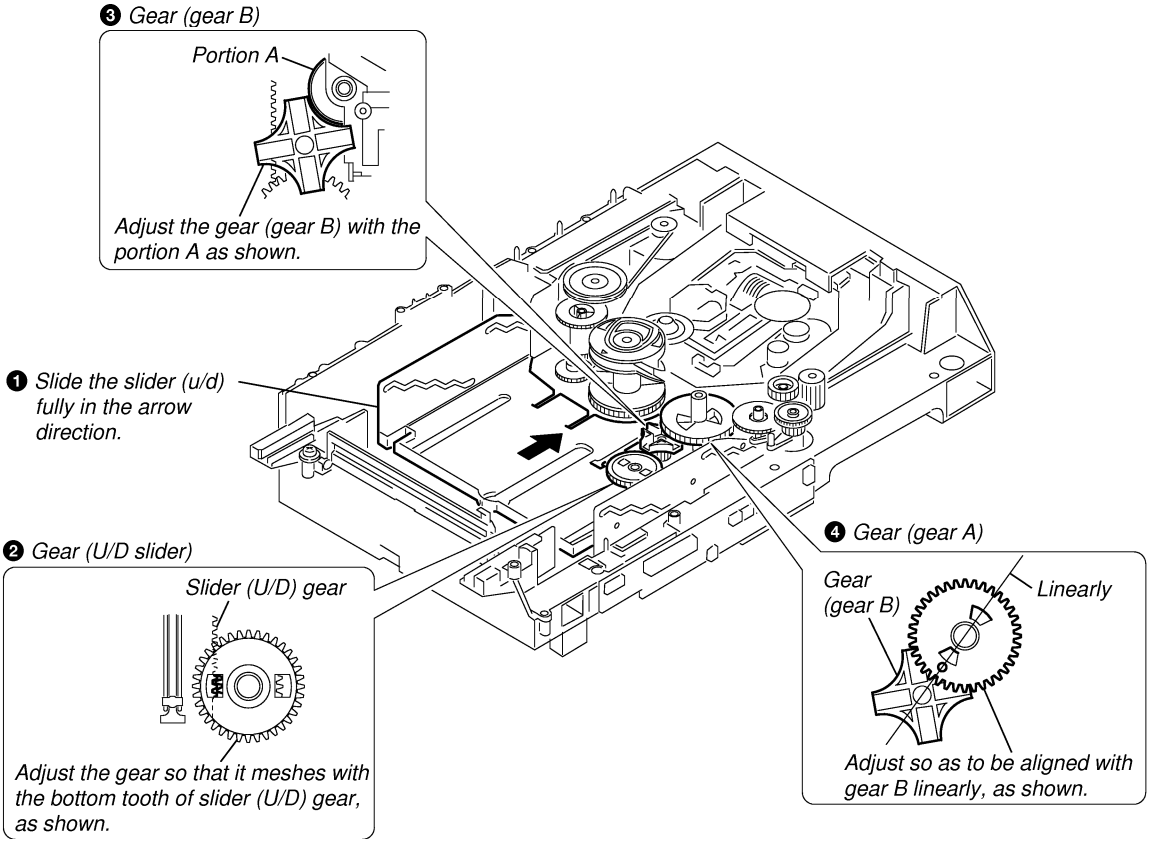


2-12. CHASSIS (MOLD B) SECTION, STOCKER SECTION AND SLIDER (SELECTION)

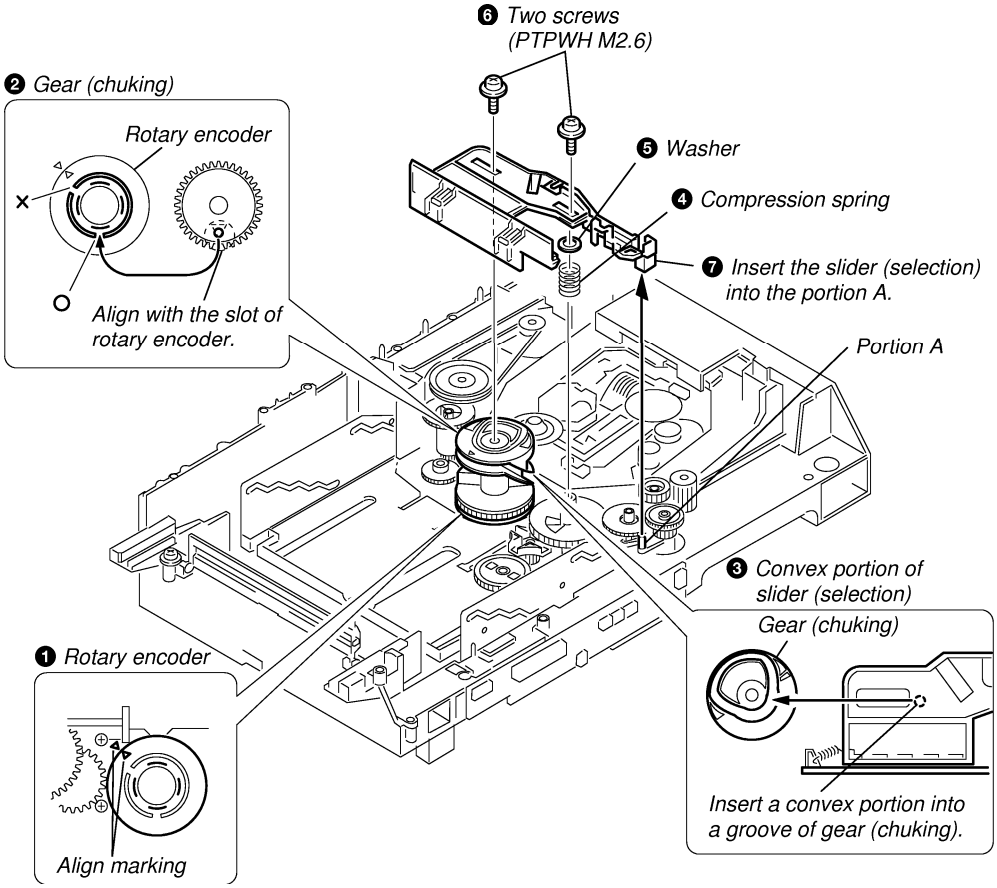
Note: In mounting the parts, refer to page 14 and 15.


❻ Two screws (PTPWH M2.6)
❺ Stocker section
❼ Slider (selection)
❽ Washer
❾ Compression spring
❶ Three screws (BVTP M2.6)
Pully (LD)
❹ Two step screws
❷ Chassis (mold B) section
Note: Rotating the pully (LD), shift the slider (selection) to the left.
❹ Two step screws
❸ Gear (eject)

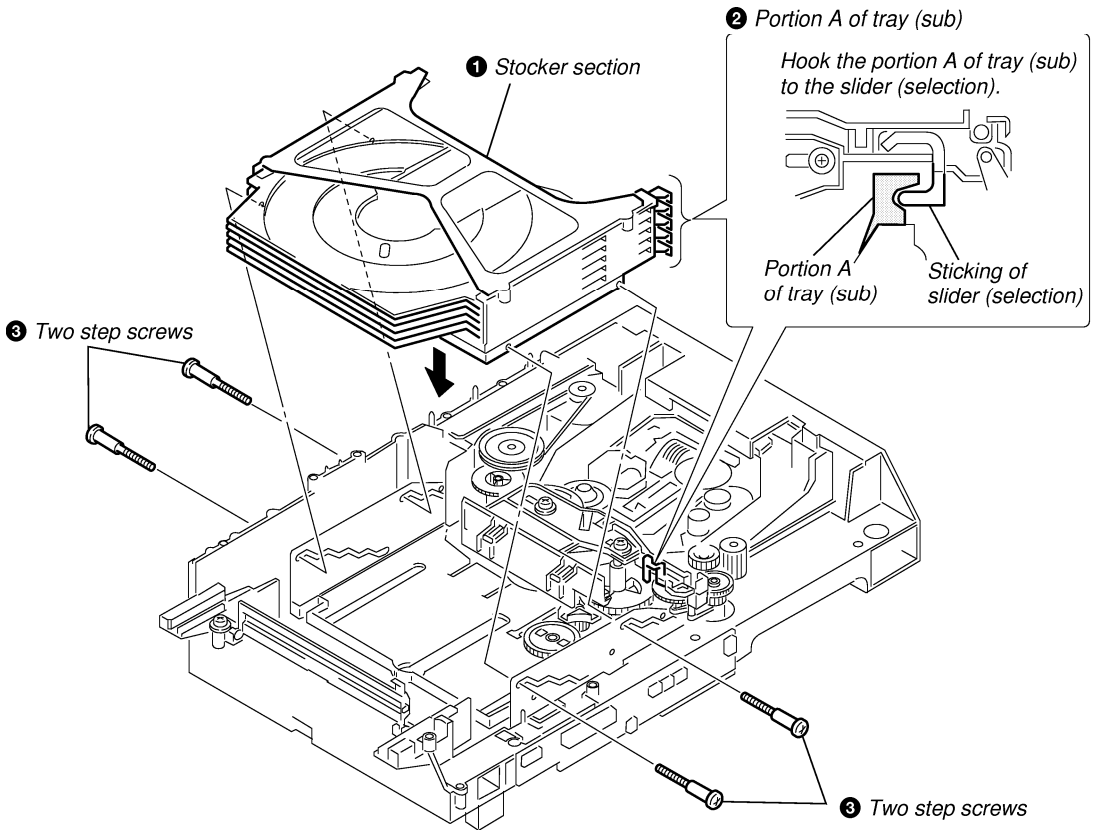
2-13. GEARS INSTALLATION


❸ Gear (gear B)
Portion A
Adjust the gear (gear B) with the portion A as shown.
❶ Slide the slider (u/d) fully in the arrow direction.
❷ Gear (U/D slider)
Slider (U/D) gear
Adjust the gear so that it meshes with the bottom tooth of slider (U/D) gear, as shown.
❹ Gear (gear A)
Gear (gear B)
Linearly
Adjust so as to be aligned with gear B linearly, as shown.

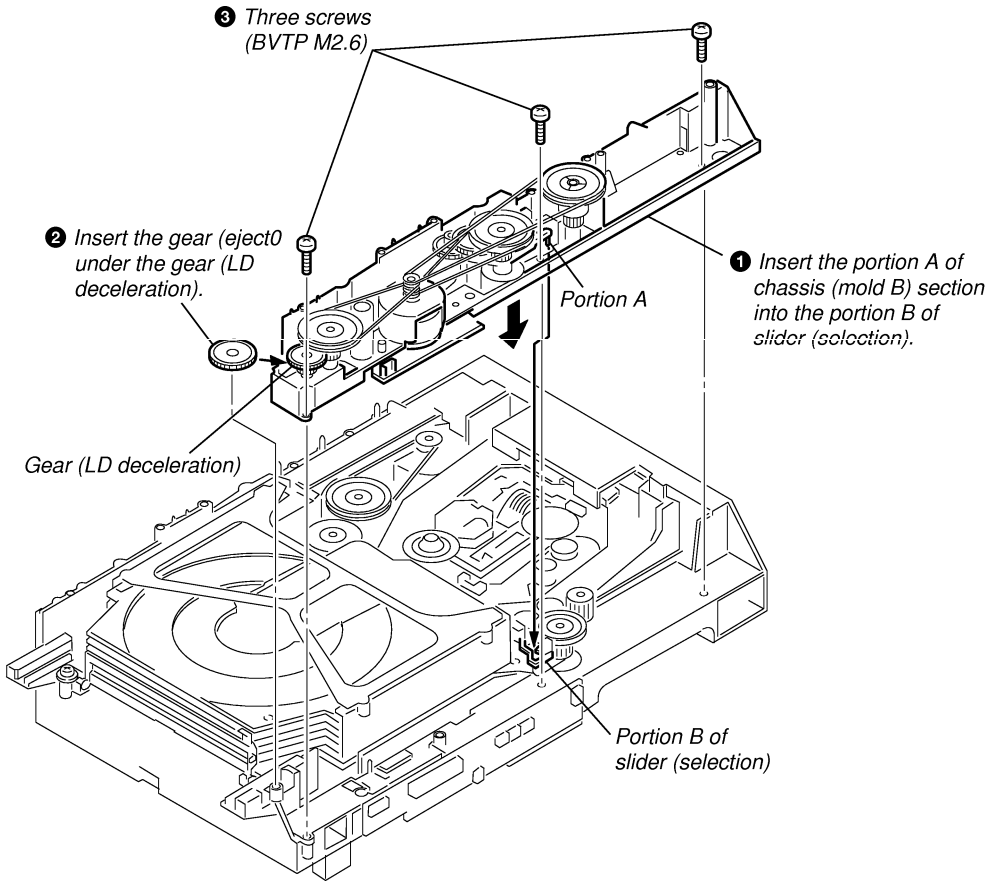
2-14. SLIDER (SELECTION) INSTALLATION


❻ Two screws (PTPWH M2.6)
❷ Gear (chuking)
Rotary encoder
Align with the slot of rotary encoder.
❺ Washer
❹ Compression spring
❼ Insert the slider (selection) into the portion A.
Portion A
❸ Convex portion of slider (selection)
Gear (chuking)
Insert a convex portion into a groove of gear (chuking).
❶ Rotary encoder
Align marking

2-15. STOCKER SECTION INSTALLATION


❷ Portion A of tray (sub)
Hook the portion A of tray (sub) to the slider (selection).
❶ Stocker section
Portion A of tray (sub)
Sticking of slider (selection)
❸ Two step screws
❸ Two step screws

2-16. CHASSIS (MOLD B) SECTION INSTALLATION


❸ Three screws (BVTP M2.6)
❷ Insert the gear (eject0 under the gear (LD deceleration).
❶ Insert the portion A of chassis (mold B) section into the portion B of slider (selection).
Portion A
Gear (LD deceleration)
Portion B of slider (selection)

SECTION 3
SERVICE MODE

[MC Cold Reset]

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press three buttons [■], [DISPLAY], and [DISC 5] simultaneously.
2. The fluorescent indicator tube displays "COLD RESET" and the set is reset.

[CD Ship Mode]

- This mode moves the pickup to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Press [V-GROOVE] button, and [I/⏻] button simultaneously.
3. After the "STANDBY" display blinks six times, a message "LOCK" is displayed on the fluorescent indicator tube, and the CD ship mode is set.

[MC Hot Reset]

- This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.

Procedure:

1. Press three buttons [■], [DISPLAY], and [DISC 1] simultaneously.
2. The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

[CD Service Mode]

- This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the pickup.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Select the function "CD".
3. Press three buttons [■], [DISPLAY], and [⏏ 3] simultaneously.
4. The CD service mode is selected.
5. With the CD in stop status, turn the shuttle knob clockwise to move the pickup to outside track, or turn the shuttle knob counter-clockwise to inside track.
6. To exit from this mode, perform as follows:
   1) Move the pickup to the most inside track.
   2) Press three buttons in the same manner as step 2.

Note:
- Always move the pickup to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
- Do not run the sled motor excessively, otherwise the gear can be chipped.

[VACS ON/OFF Mode]

- This mode is used to switch ON and OFF the VACS (Variable Attenuation Control System).

Procedure:

Press the [ENTER] and [■] buttons simultaneously. The message "VACS OFF" or "VACS ON" appears.

[Change-over of AM Tuner Step between 9 kHz and 10 kHz]

- A step of AM channels can be changed over between 9 kHz and 10 kHz.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Select the function "TUNER", and press [TUNER/BAND] button to select the BAND "AM".
3. Press [I/⏻] button to turn the set OFF.
4. Press [MODE SELECT] and [I/⏻] buttons simultaneously, and the display of fluorescent indicator tube changes to "AM 9 k STEP" or "AM 10 k STEP", and thus the channel step is changed over.

[GC Test Mode]

- This mode is used to check the software version, FL tube, LED, keyboard and VACS.

Procedure:

1. Press three buttons [■], [ENTER], and [DISC 2] simultaneously.
2. LEDs and fluorescent indicator tube are all turned on.
3. When you want to enter the software version display mode, press [DISC 1]. The model number and destination are displayed.
4. Each time [DISC 1] is pressed, the display changes starting from MC version, GC version, VC version, CD version, CM version, ST version, TC version, TA version, TM version and BR version in this order, and returns to the model number and destination display.
5. When [DISC 3] is pressed while the version numbers are being displayed except model number and destination, year, month and day of the software creation appear. When [DISC 3] is pressed again, the display returns to the software version display. When [DISC 1] is pressed while year, month and day of the software creation are being displayed, the year, month and day of creation of the software versions are displayed in the same order of version display.
6. Press [DISC 2] button, and the key check mode is activated.
7. In the key check mode, the fluorescent indicator tube displays "KEY0 VOL0". Each time a button is pressed, "KEY" value increases. However, once a button is pressed, it is no longer taken into account.
   "VOL" value increases like 1, 2, 3 ... if rotating [VOLUME] knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "–" direction.
8. Flopping the [Multi stick] button to the up position shows the indication " ↑ ", the down position shows " ↓ ", the left position shows " ← " and the right position " → ".
9. Also when [DISC 3] is pressed after lighting of all LEDs and FL tubes, value of VACS appears.
10. To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

[MC Test Mode]

• This mode is used to check operations of the respective sections of Amplifier, Tuner, CD and Tape.

Procedure:

1. Press the three buttons of [■], [DISPLAY] and [DISC 3] simultaneously.
2. A message "TEST MODE" appears on the FL display tube.
3. When [△ (CURSOR UP)] button is pressed, GEQ increases to its maximum and a message "GEQ MAX" appears.
4. When [▽ (CURSOR DOWN)] button is pressed, GEQ decreases to its minimum and a message "GEQ MIN" appears.
5. When [◁ (CURSOR LEFT)] or [▷ (CURSOR RIGHT)] button is pressed, GEQ is set to flat and a message "GEQ FLAT" appears.
6. When the VOLUME control knob is turned clockwise even slightly, the sound volume increases to its maximum and a message "VOLUME MAX" appears for two seconds, then the display returns to the original display.
7. When the VOLUME control knob is turned counter-clockwise even slightly, the sound volume decreases to its minimum and a message "VOLUME MIN" appears for two seconds, then the display returns to the original display.
8. In the test mode, the default-preset channel is called even when the TUNER is selected and an attempt is made to call the preset channel that has been stored in memory, by operating the Shuttle knob. (It means that the memory is cleared.)
9. When CD is selected. Press the [MODE SELECT] button and press the [ENTER] button in the "Setup Mode". Move the [Multi stick] to the right or left and press the [ENTER] button in the "CD Edit Start" mode.
   The disc that is being chucked at this moment becomes the default setting. It means that the default disc only is accessed when any other discs are selected even though the display indication changes accordingly. At the same time, the [DISC 1] button to [DISC 5] button cannot be accepted. (It means that the tray motor and the turntable motor are disabled of their operation.)
10. When a tape is inserted in Deck B and recording is started, the input source function selects VIDEO automatically.
11. When [■] button is pressed to stop recording, the Tape (Deck) B is selected and tape is rewound using the [◀◀] button, tape is rewound, tape is stops at around the record-starting position and playback of the recorded portion of the tape is started. If PAUSE is inserted even once during recording, tape is rewound to the position around the PAUSE position and is played back.
12. When the [HI-DUB] Button is press during playback of Deck B, either normal speed or high speed can be selected by this button.
13. Select the desired loop as follows. Press the [MODE SELECT] button and press the [ENTER] button in the "Setup Mode". Move the [Multi stick] button to the right or left and press the [ENTER] button in the "Direction setup". Move the [Multi stick] button to the right or left and press [ENTER] at "Cycle". Insert a test tape AMS-110A or AMS-RO to Deck A.
14. Press the [CD SYNCHRO] button to enter the AMS test mode.
15. After a tape is rewound first, the FF AMS is checked, and the mechanism is shut off after detecting the AMS signal twice.
16. Then the REW AMS is checked and the mechanism is shut off after detecting the AMS signal twice.
17. When the check is complete, a message of either OK or NG appears.
18. When you want to exit this mode, press the [I/⏻] button twice. The cold reset is enforced at the same time.

[Aging Mode]

During the aging mode, both the CD player and tape deck are executed together.

• If an error occurs:

Aging stops, and the error state is displayed on the fluorescent display tube.

• If no error occurs:

Aging is repeated.

Procedure:

1. Press the [I/⏻] button to turn the set ON.
2. Load 10 minute tapes with unbent rec-proof tabs in decks A and B.
3. Set CD on the DISC 1 table.
4. Set the CD mode REPEAT to OFF and PLAY MODE to ALL DISCS.
   (Press the [MODE SELECT] button and move the [Multi stick] button to set these modes.)
5. Press the FUNCTION button to switch the function to "CD".
6. Press the three buttons [■], [DISPLAY], and [DISC 4] button simultaneously.
7. Aging starts.
8. To end aging, press the [I/⏻] button to turn the set OFF.

Aging Sequence:

Aging is performed in the following sequence.

• Tape Deck

1. The tape in deck A is rewound. "TAPE A AG-1" is displayed.
2. The FWD side of deck A is played for two minutes. "TAPE A AG-2" is displayed.
3. The tape in deck A is fast forwarded. "TAPE A AG-3" is displayed. Fast forward is carried out for 20 seconds or to the tape end.
4. The RVS side of deck A is played for two minutes. "TAPE A AG-4" is displayed.
5. The tape in deck A is rewound. "TAPE A AG-5" is displayed.
6. The FWD side of deck B is played for two minutes. "TAPE B AG-2" is displayed.
7. The tape in deck B is fast forwarded. "TAPE B AG-3" is displayed. Fast forward is carried out for 20 seconds or to the tape end.
8. The RVS side of deck B is played for two minutes. "TAPE B AG-4" is displayed.
9. The tape in deck B is rewound. "TAPE B AG-5" is displayed.
10. Repeated from step 2.

• CD

1. DISC 1 is chucked.
2. The TOC is read.
3. The first track is played for 3 seconds.
4. The last track is played for 3 seconds.
5. DISC 1 tray open and close.
6. Repeated from step 1.

• Display when ended abnormally

When the tape deck is abnormal:

The state when ended abnormally is displayed.
The contents of display are the same as that during aging.

When the CD player is abnormal:

A message indicating that errors such as "CD MEC ERR" have occurred.
Check the error contents in the following error history display mode.

[Error History Display Mode]

Mode which enables the history of error occurring in the CD player to be checked.
Execute this mode after ending the aging mode.

Procedure:

1. Press the [I/⏻] button to turn the set ON.
2. Press the three buttons [■] , [DISPLAY] , and [⏏1] simultaneously.
3. Select the desired display mode from the following modes by moving the [Multi stick] button to the right and left.
   - Number of mechanism errors display mode
   - Mechanism error display mode
   - Number of times of NO DISC display mode
   - NO DISC display mode
4. Press the [I/⏻] button to end and turn the set OFF.
5. To erase the error history, perform COLD reset.
   (Press the three buttons [■] , [DISPLAY] , and [DISC 5] simultaneously.

- Viewing the mechanical error history display
  (Switch the history by moving the [Multi stick] up and down)

Display
[CDM E@@D##$%!]

@@ : Error number. 00 is the newest.

: Mechanism error after initialization is complete.

$: 1 or 2 : Mechanism error during the tray loading in between the stocker position and the rear position behind the stocker position.

% : 2 : Mechanism error during up and down movement of stocker.

! : 2 : Mechanism error of clamper and that during mode switching.

- Viewing the NO DISC ERROR history display
  (Switch the history by moving the [Multi stick] up and down)

Display
[No E@@D##$$%]

@@ : Error number. 00 is the newest

: Error contents
  01 : Focus error
  02 : GFS error
  03 : Setup error

$$: Retries
  00 : NO DISC is determined without attempting chucking retry
  02 : NO DISC is determined after chucking retry.

% : State when determined as NO DISC
1 : When stopped
2 : At setup
3 : At TOC READ
4 : When accessing
5 : When playing
6 : When pausing
7 : When manual searching (during play)
8 : When manual searching (during pausing)

SECTION 4
MECHANICAL ADJUSTMENTS

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback heads — pinch rollers
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	3.06 N • m to 6.96 N • m 31 to 71 g • cm (0.43 – 0.98 oz • inch)
FWD back tension	CQ-102C	0.19 N • m to 0.58 N • m 2 to 6 g • cm (0.02 – 0.08 oz • inch)
REV	CQ-102RC	3.06 N • m to 6.96 N • m 31 to 71 g • cm (0.43 – 0.98 oz • inch)
REV back tension	CQ-102RC	0.19 N • m to 0.58 N • m 2 to 6 g • cm (0.02 – 0.08 oz • inch)
FF/REW	CQ-201B	6.96 N • m to 14.02 N • m 71 to 143 g • cm (0.98 – 1.99 oz • inch)
FWD tension	CQ-403A	9.80 N • m 100 g or more (3.53 oz or more)
REV tension	CQ-403R	9.80 N • m 100 g or more (3.53 oz or more)

SECTION 5
ELECTRICAL ADJUSTMENTS

DECK SECTION **0 dB=0.775V**

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

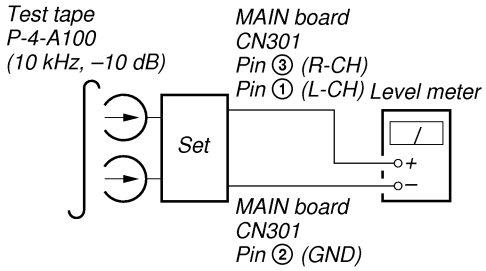
Tape	Signal	Used for
P-4-A100	10 kHz, –10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

Record/Playback Head Azimuth Adjustment (Deck A, Deck B)

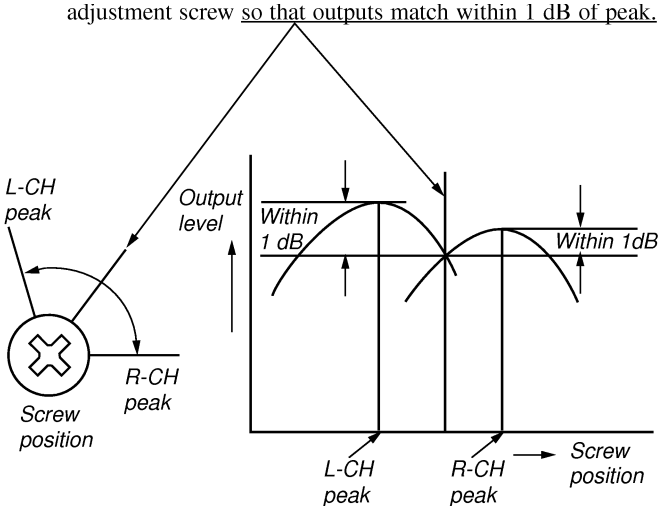
Note: Perform this adjustments for both decks.

Procedure:

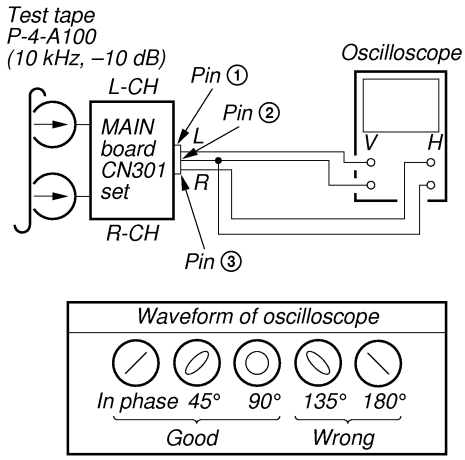
1. Mode : Playback



2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.

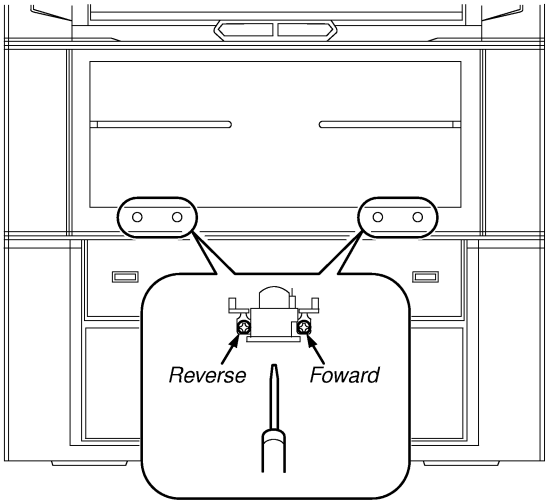


3. Mode: Playback



4. After the adjustments, apply suitable locking compound to the parts adjusted.

Adjustment Location: Playback Head (Deck A)
Record/Playback/Erase Head (Deck B)



Tape Speed Adjustment (Deck A)

Note: Set the test mode using the following method and begin tape speed adjustment.
In the test mode, the speed will switch to double speed or normal speed each time the HI-SPEED DUB button is pressed.

Procedure:
With the power turned ON, press the ■ button, DISPLAY button, and DISC 3 button simultaneously.
(The "VOLUME" on the fluorescent display tube will blink while in the test mode.)
To exit the test mode, press the I/⏻ button.

1. Insert the WS-48B into deck B.
2. Press the ▷ button of deck B.
3. Press the HI-DUB button and play the tape at double speed.
4. Adjust RV1001 of the LEAF SW board so that the reading of the frequency counter becomes 6000 ± 180 Hz.
5. Press the HI-DUB button and play the tape at normal speed.
6. Adjust RV1002 of the LEAF SW board so that the reading of the frequency counter becomes 3000 ± 90 Hz.

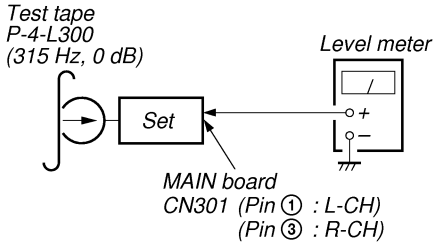
Adjustment Location: LEAF SW board

Sample Value of Wow and flutter

W.RMS (JIS) less than 0.3%
(test tape: WS-48B)

Playback Level Adjustment (Deck A, Deck B)

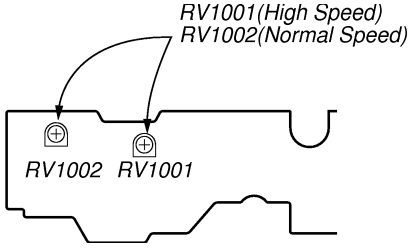
Procedure:
Mode: Playback



Deck A is RV311 (L-CH) and RV411 (R-CH), deck B is RV301 (L-CH) and RV401 (R-CH)
so that adjustment within the following adjustment level.

Adjustment level:
CN301 playback level: 301.5 to 338.3 mV (–8.2 to –7.2 dB)
level difference between the channels: within ± 0.5 dB
Adjustment Location: AUDIO board

Adjustment Location [LEAF SW BOARD]

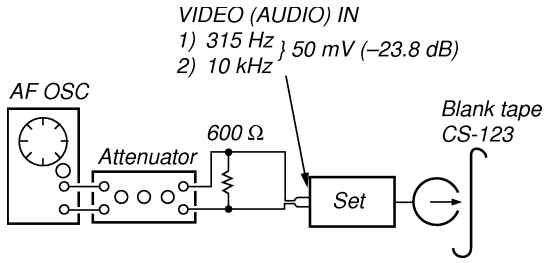


Record Bias Adjustment (Deck B)

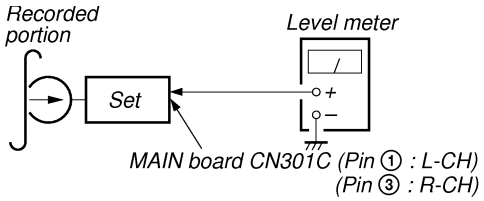
Procedure:

INTRODUCTION
When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO 1.
(After recording, press the ◀◀ button without stopping will return to the position where recording was started.)

1. Press FUNCTION button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B, press the REC PAUSE/START button, and then press the ▷ button to start recording.
3. Mode: Record
4. Mode: Playback



5. Confirm playback the signal recorded in step 2 become adjustment level as follows.



If these levels do not adjustment level, adjust the RV341 (L-CH) and RV441 (R-CH) on the AUDIO board to repeat steps 3 and 4.

Adjustment level: The playback output of 10 kHz level difference against 315 Hz reference should be ± 1.0 dB.

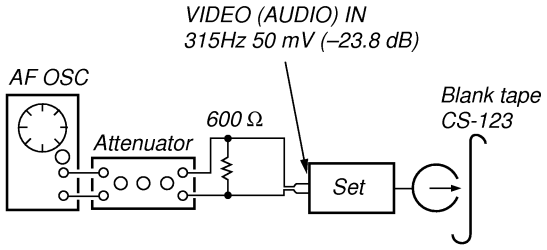
Adjustment Location: AUDIO board

Record Level Adjustment (Deck B)

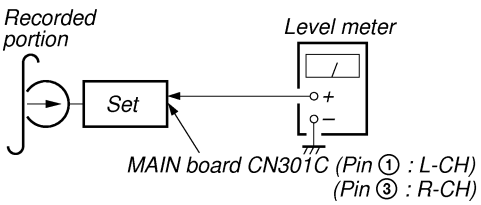
Procedure:

INTRODUCTION
When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO 1.
(After recording, press the ◀◀ button without stopping will return to the position where recording was started.)

1. Press FUNCTION button to select VIDEO 1. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B, press the ● REC button, and then press the ▷ button to start recording.
3. Mode: Record
4. Mode: Playback



5. Confirm playback the signal recorded in step 2 become adjustment level as follows.

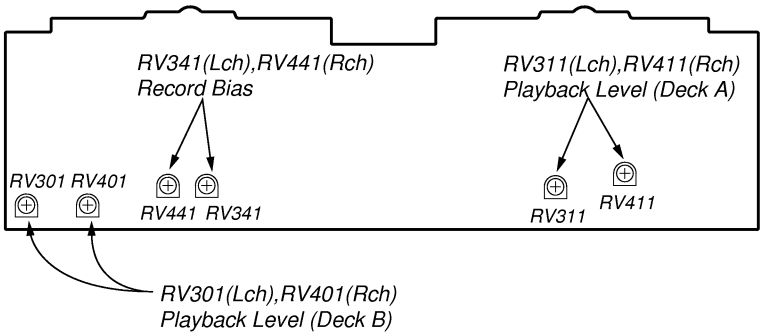


If these levels do not adjustment level, adjust the RV301 (L-CH) and RV351 (R-CH) on the MAIN board to repeat steps 3 and 4.

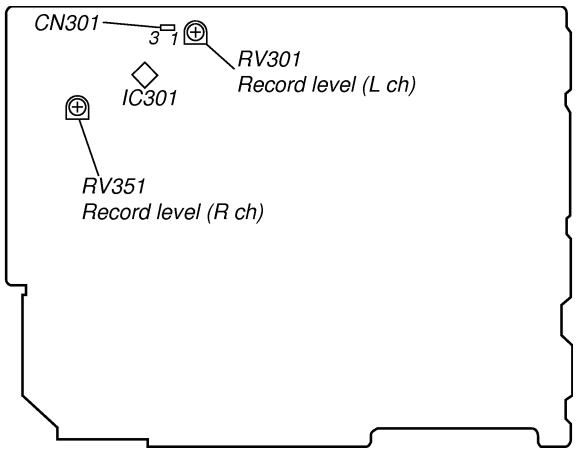
Adjustment level:
CN403 playback level: 47.2 to 53.0 mV (–24.3 to –23.3 dB)

Adjustment Location: MAIN board

Adjustment Location:
[AUDIO BOARD] (Conductor Side)



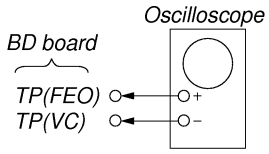
[MAIN BOARD] (Conductor Side)



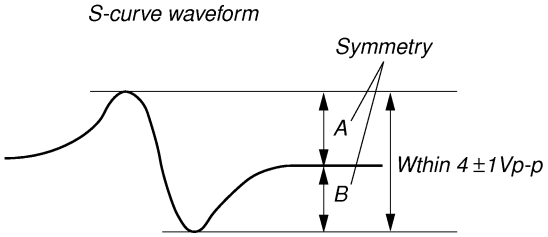
CD SECTION

Note :
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-Curve Check



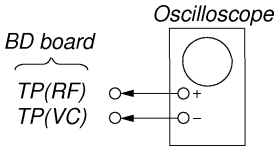
Procedure :
1. Connect oscilloscope to TP (FEO).
2. Connect between TP (FEI) and TP (VC) by lead wire.
3. Connect between TP (AGCCON) and TP (GND) by lead wire.
4. Turn Power switch on.
5. Load a disc (YEDS-18) and actuate the focus search. (In consequence of open and close the disc tray, actuate the focus search)
6. Confirm that the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 4 ±1 Vp-p.



7. After check, remove the lead wire connected in step 2 and 3.

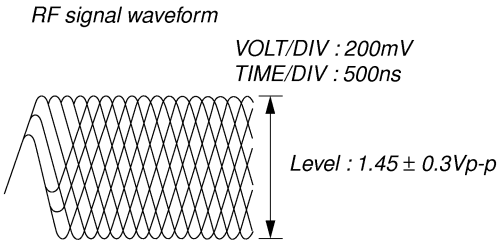
Note : • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

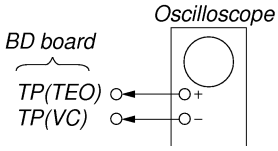


Procedure :
1. Connect oscilloscope to TP (RF).
2. Connect between TP (AGCCON) and TP (GND) by lead wire.
3. Turned Power switch on.
4. Load a disc (YEDS-18) and playback.
5. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.
6. After check, remove the lead wire connected in step 2.

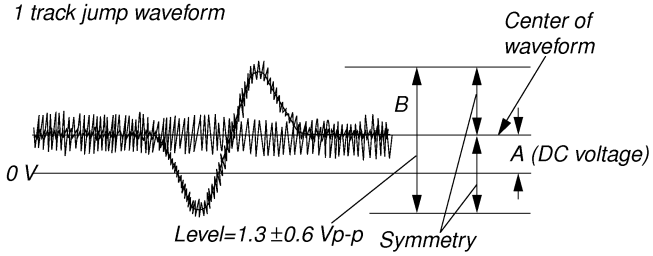
Note : Clear RF signal waveform means that the shape " ◊ " can be clearly distinguished at the center of the waveform.



E-F Balance (1 Track jump) Check



Procedure :
1. Connect oscilloscope to TP (TEO) and TP (VC).
2. Turned Power switch on.
3. Load a disc (YEDS-18) and playback the number five track.
4. Press the ▮▮ button. (Becomes the 1 track jump mode.)
5. Confirm that the level B and A (DC voltage) on the oscilloscope waveform.

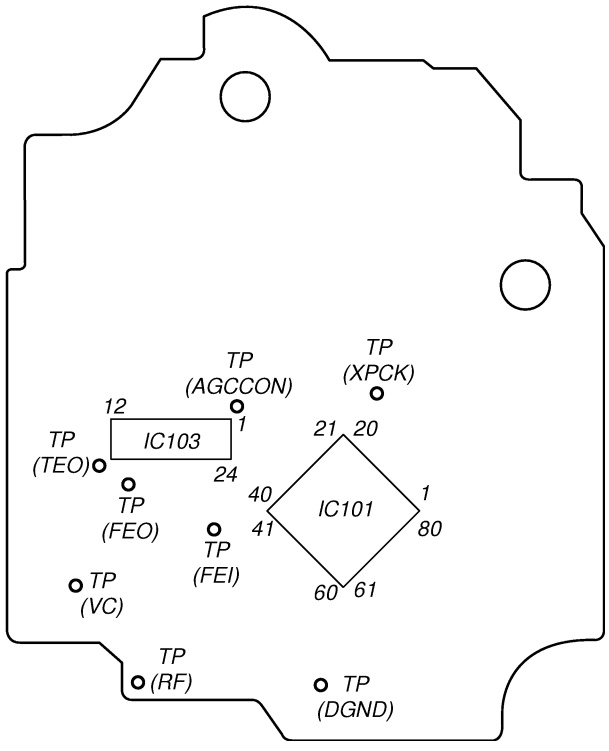


Specified level: $\frac{A}{B} \times 100$ = less than ± 22 %

6. After check, remove the lead wire connected in step 1.

Adjustment Location:

[BD BOARD] (Conductor Side)



SECTION 6
DIAGRAMS

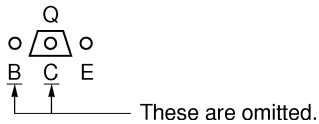
NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS
(In addition to this, the necessary note is printed in each block)

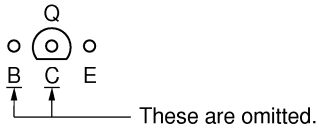
Note on Printed Wiring Board:

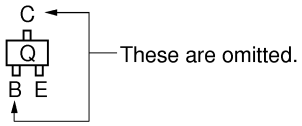
- ⚬——— : parts extracted from the component side.
- △ : internal component.
- ▒▒▒ : Pattern from the side which enables seeing.

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

- Indication of transisitor.







Note on Schematic Diagram:

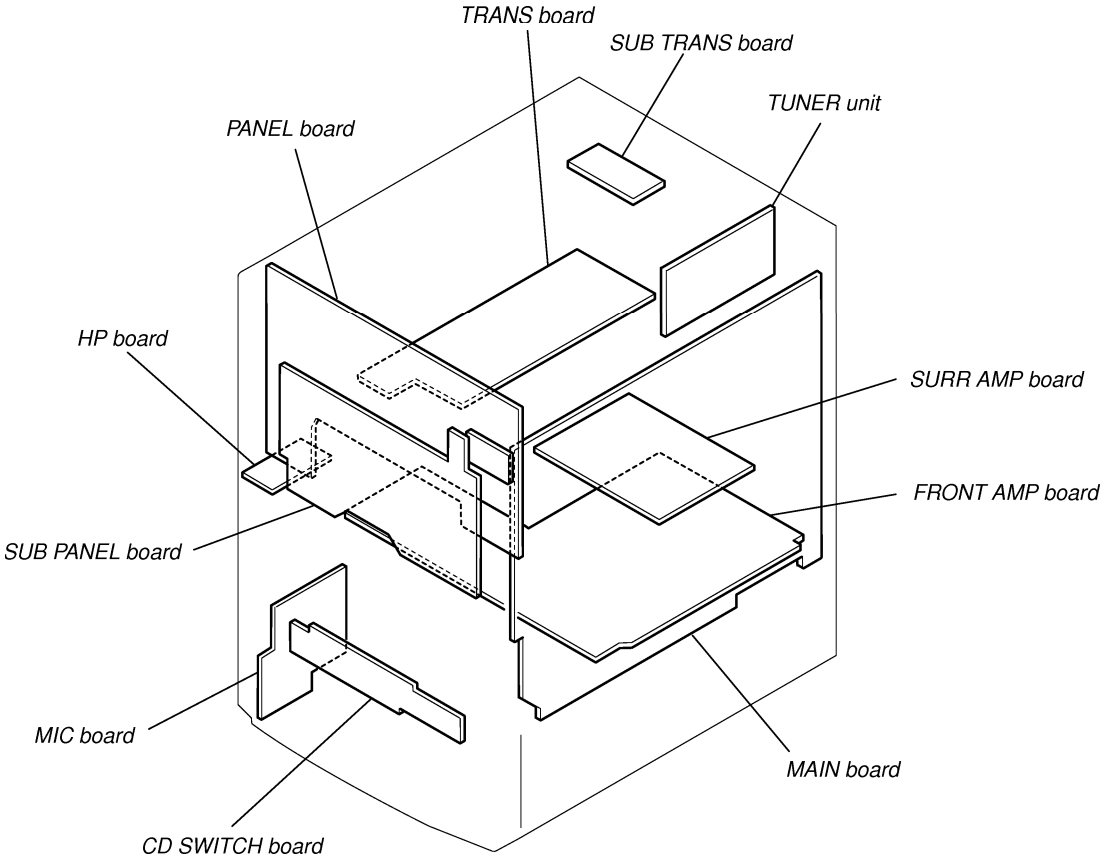
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

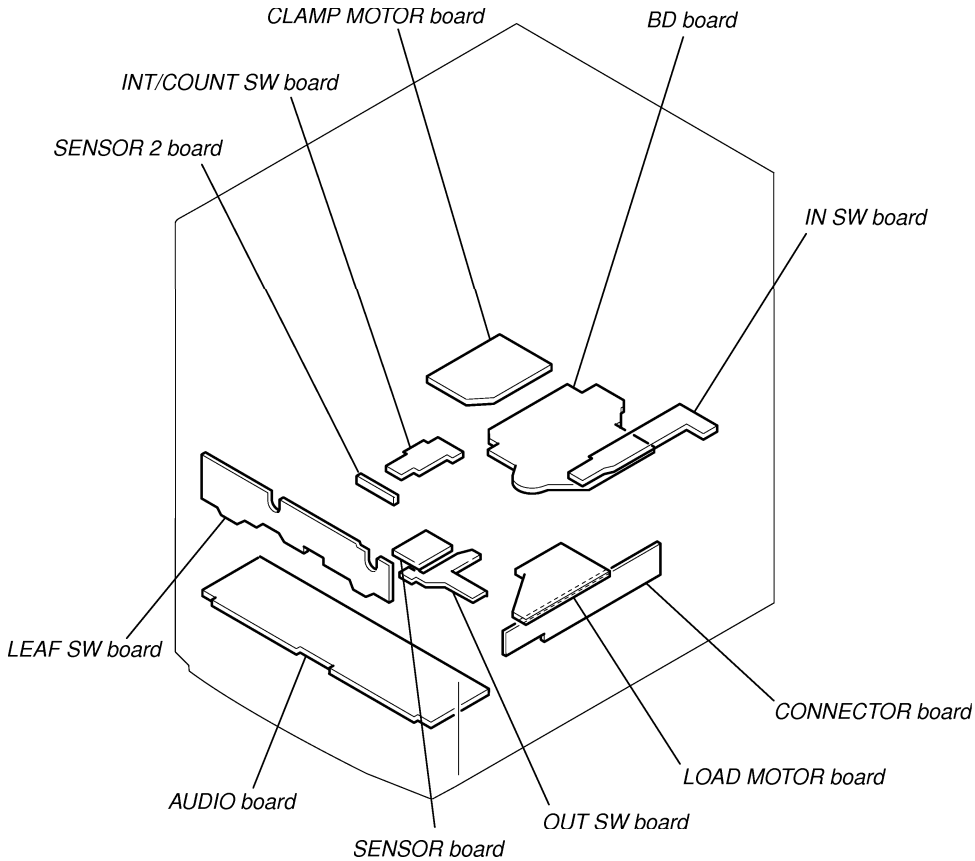
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B + : B+ Line.
- B − : B– Line.
- : adjustment for repair.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : TUNER (FM/AM)
  - : PLAYBACK (DECK A)
  - : PLAYBACK (DECK B)
  - : RECORD
  - : CD PLAY (ANALOG OUT)
  - : CD PLAY (DIGITAL OUT)
  - : MIC INPUT
- Abbreviation

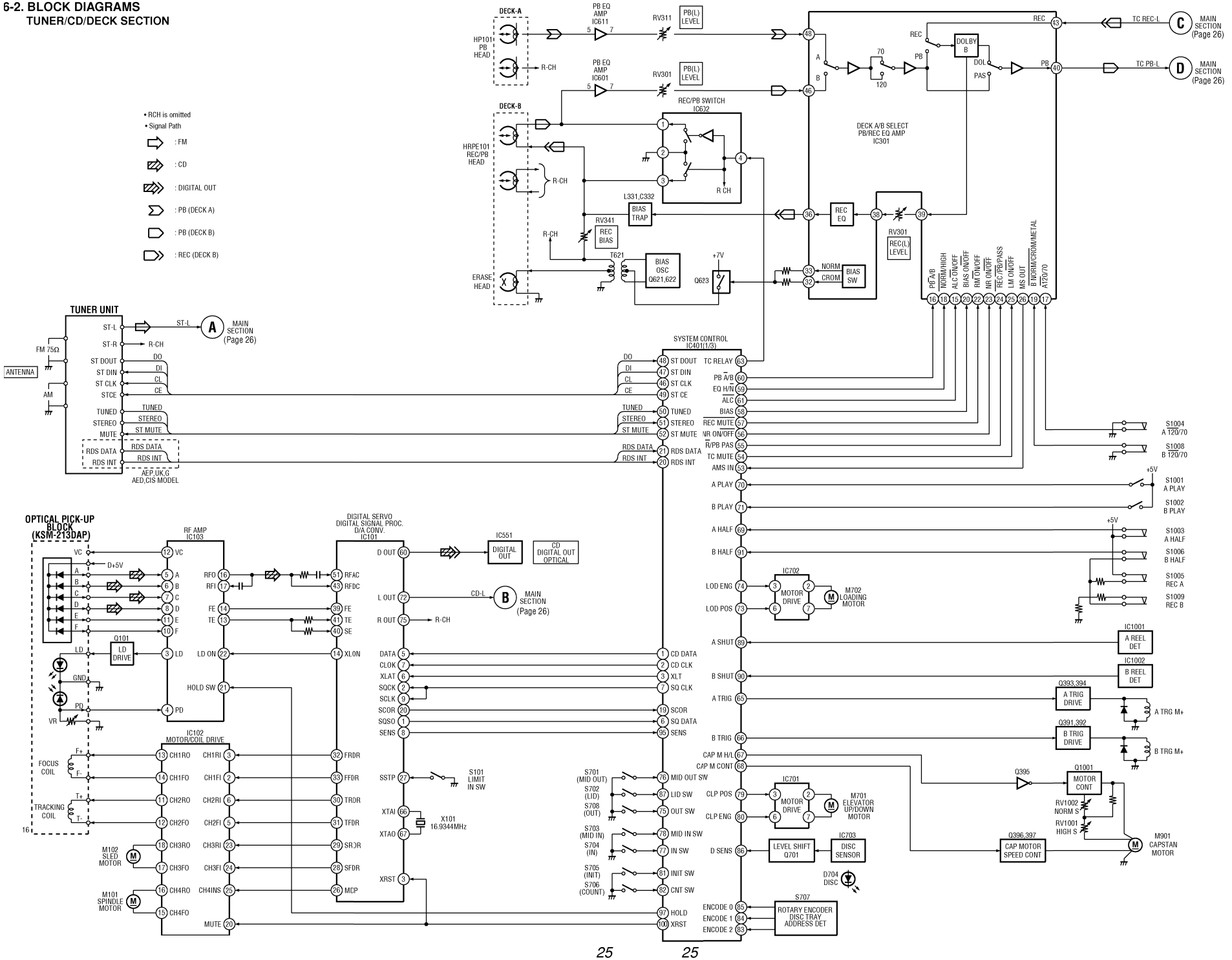
CND	: Canadian model.
G	: German model.
EA	: Saudi Arabia model.
AUS	: Australian model.
SP	: Singapore model.
MY	: Malaysia model.
AR	: Argentine model.
TH	: Thai model.
AED	: North European model.
MX	: Mexican model.
KR	: Korean model.

6-1. CIRCUIT BOARDS LOCATION

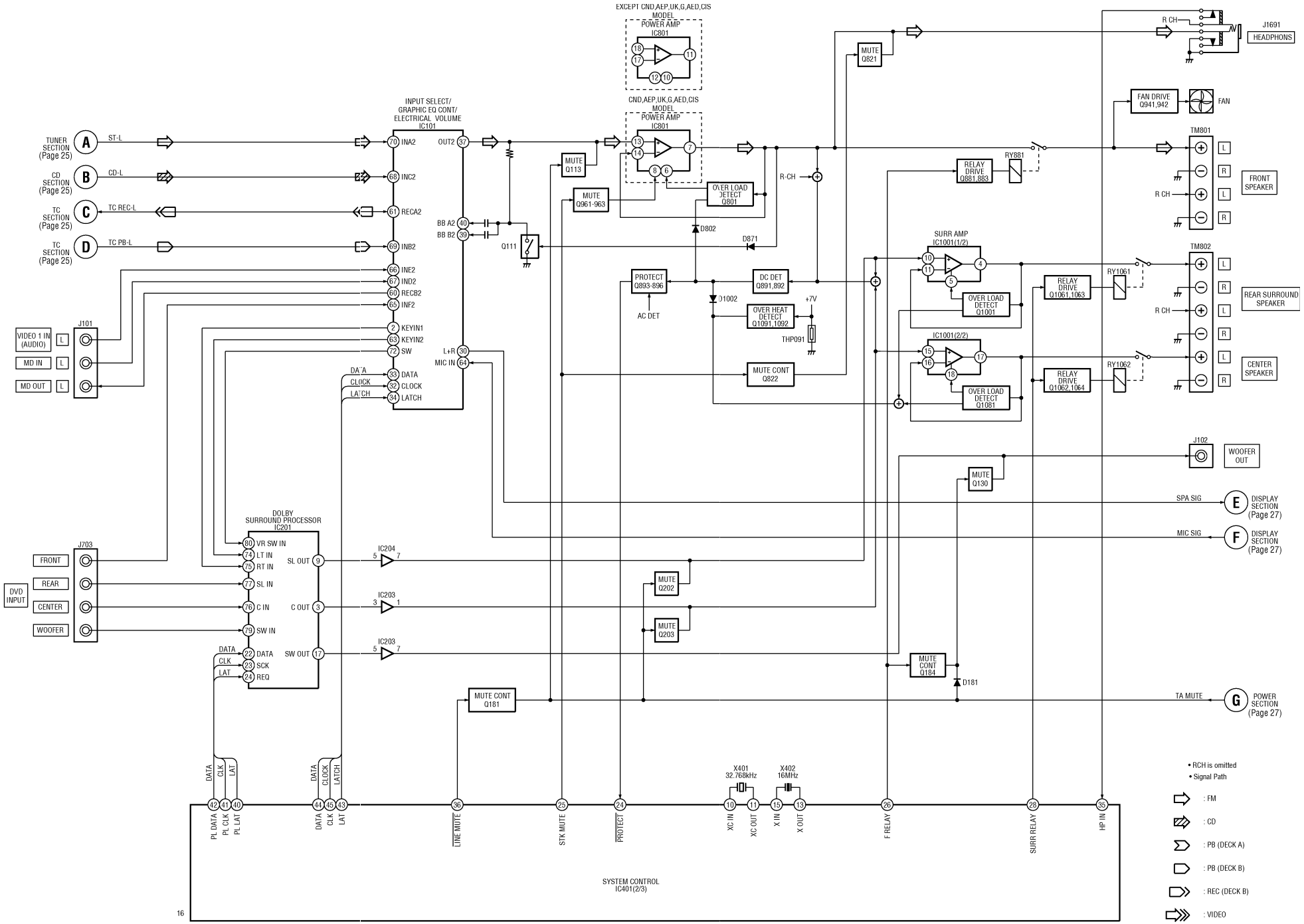




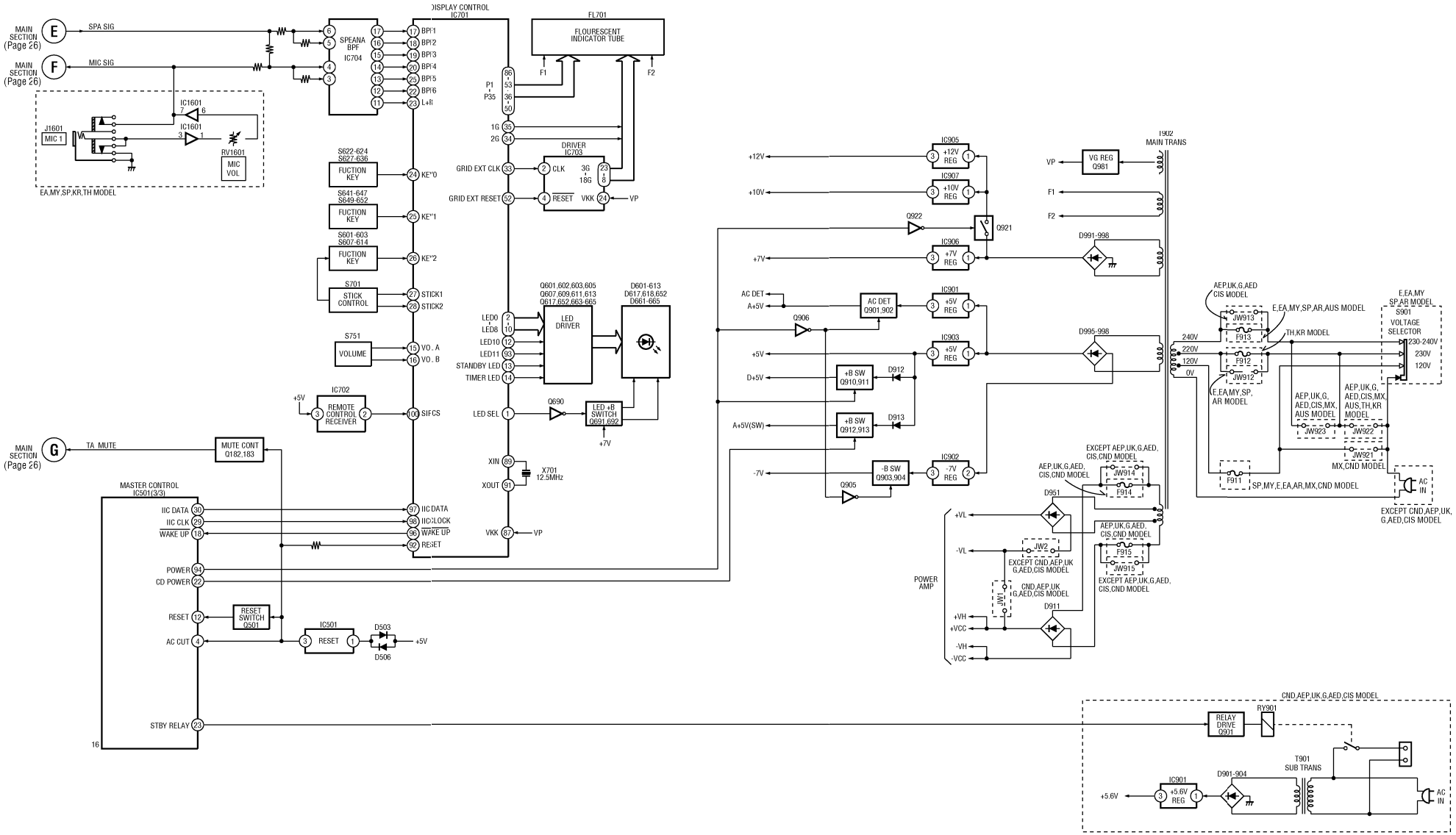
6-2. BLOCK DIAGRAMS
TUNER/CD/DECK SECTION



MAIN SECTION



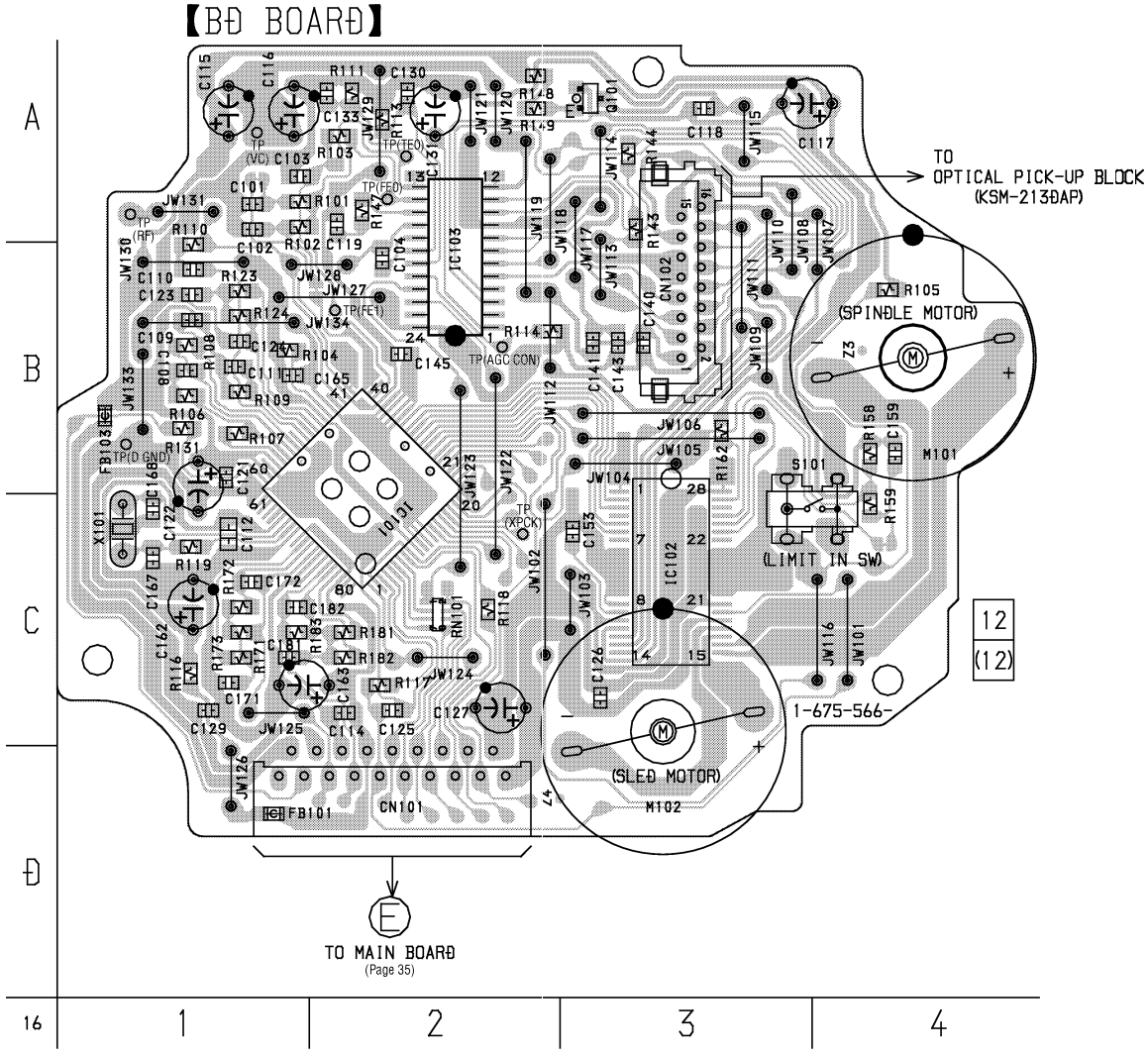
DISPLAY/POWER SECTION



6-3. PRINTED WIRING BOARD BD Board • See page 24 for Circuit Boards Location.

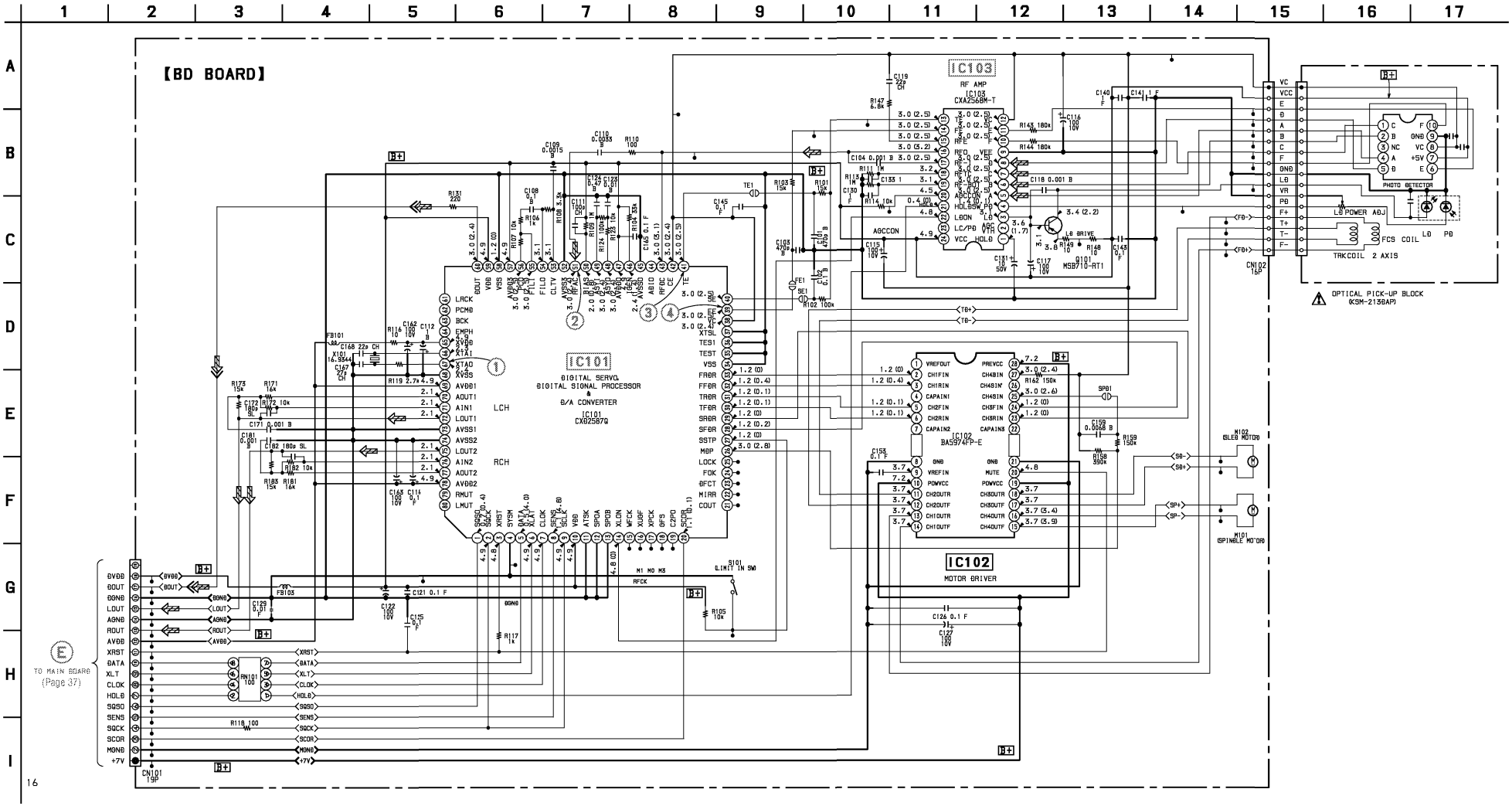
• **Semiconductor Location**

Ref. No.	Location
IC101	C-2
IC102	C-3
IC103	B-2
Q101	A-3



6-4. SCHEMATIC DIAGRAM BD Board

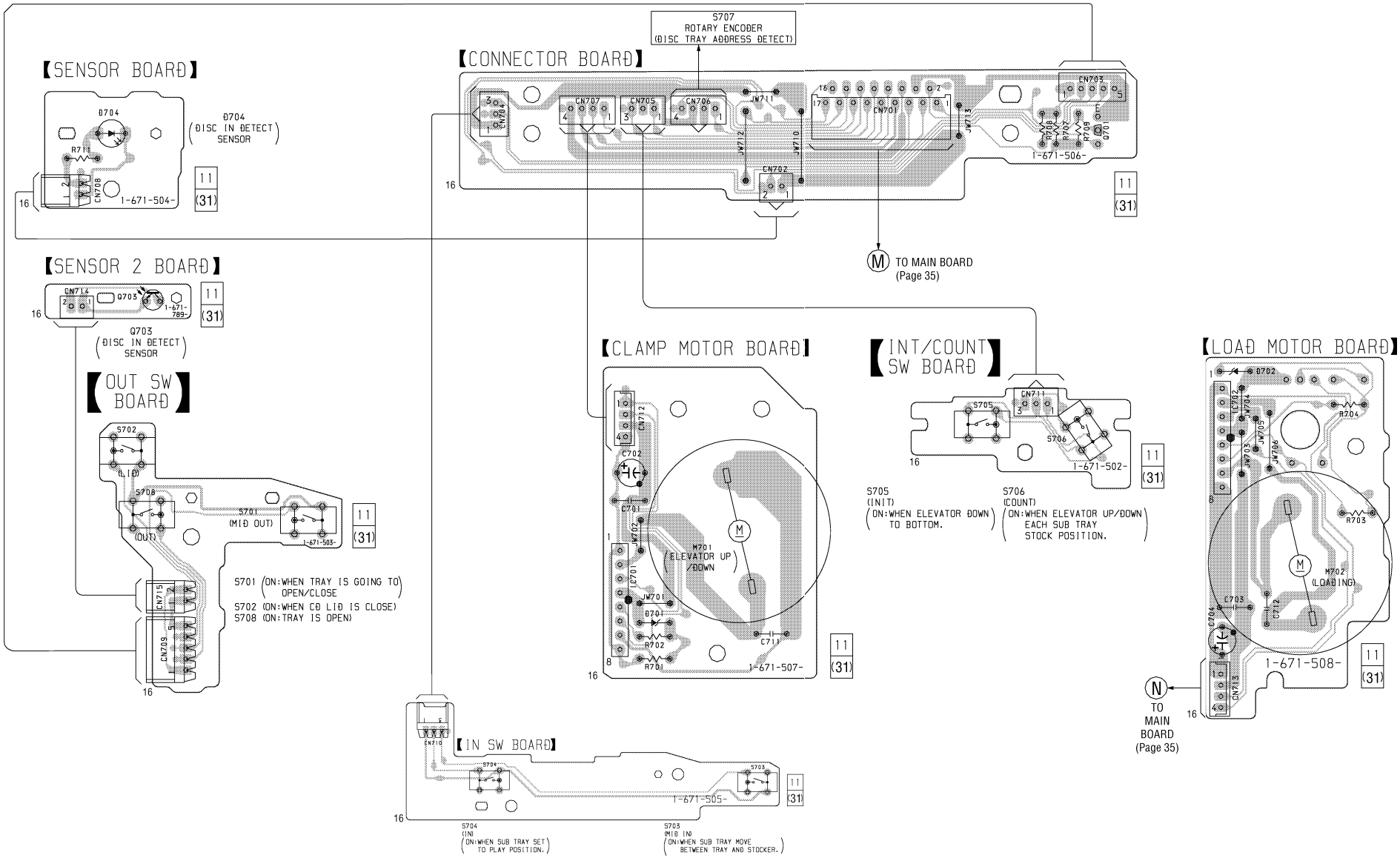
• See page 42 for Waveforms.
• See page 50 for IC Block Diagrams.



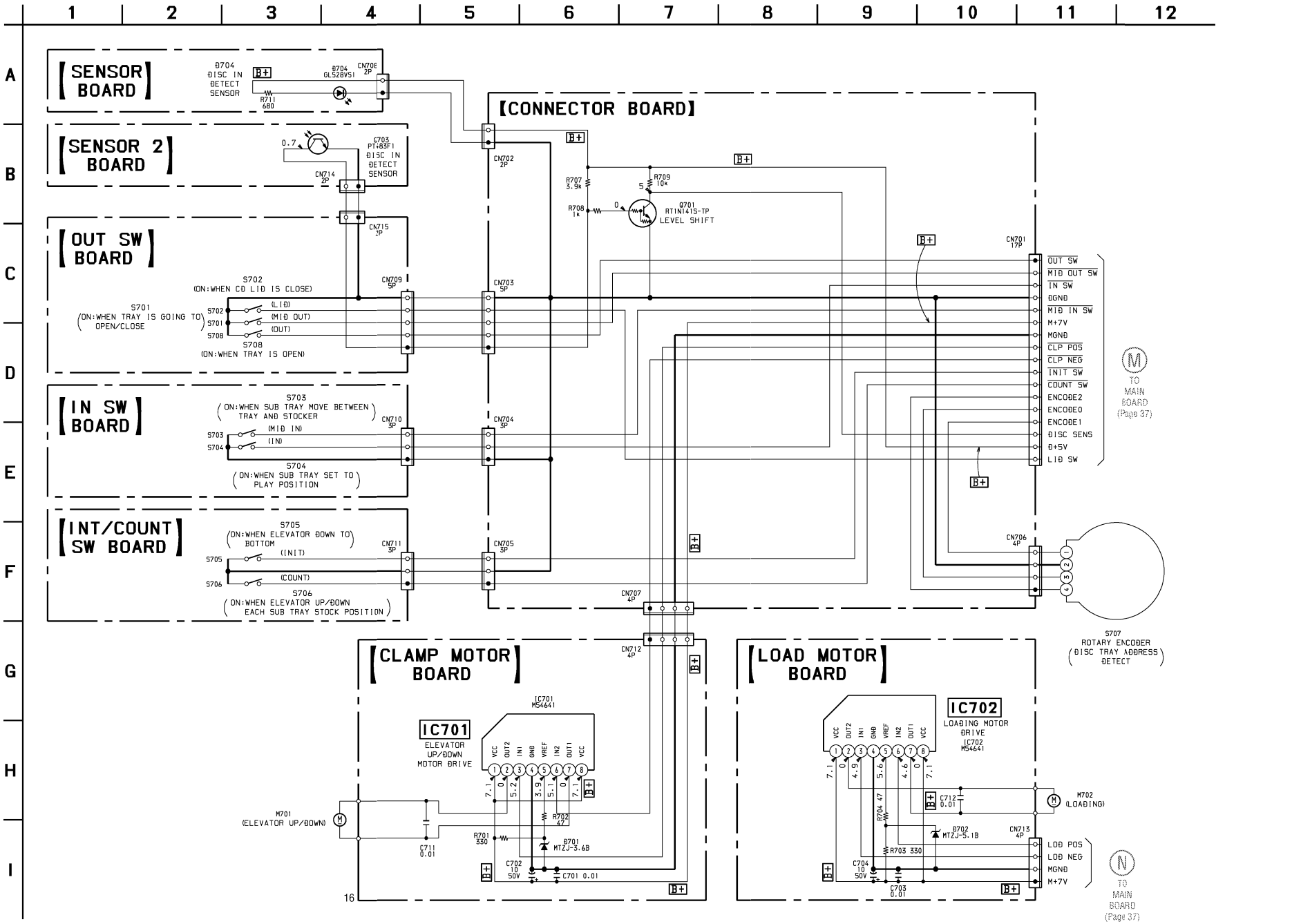
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : CD STOP
( ) : CD PLAY

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-5. PRINTED WIRING BOARDS SENSOR/MOTOR Section • See page 24 for Circuit Boards Location.



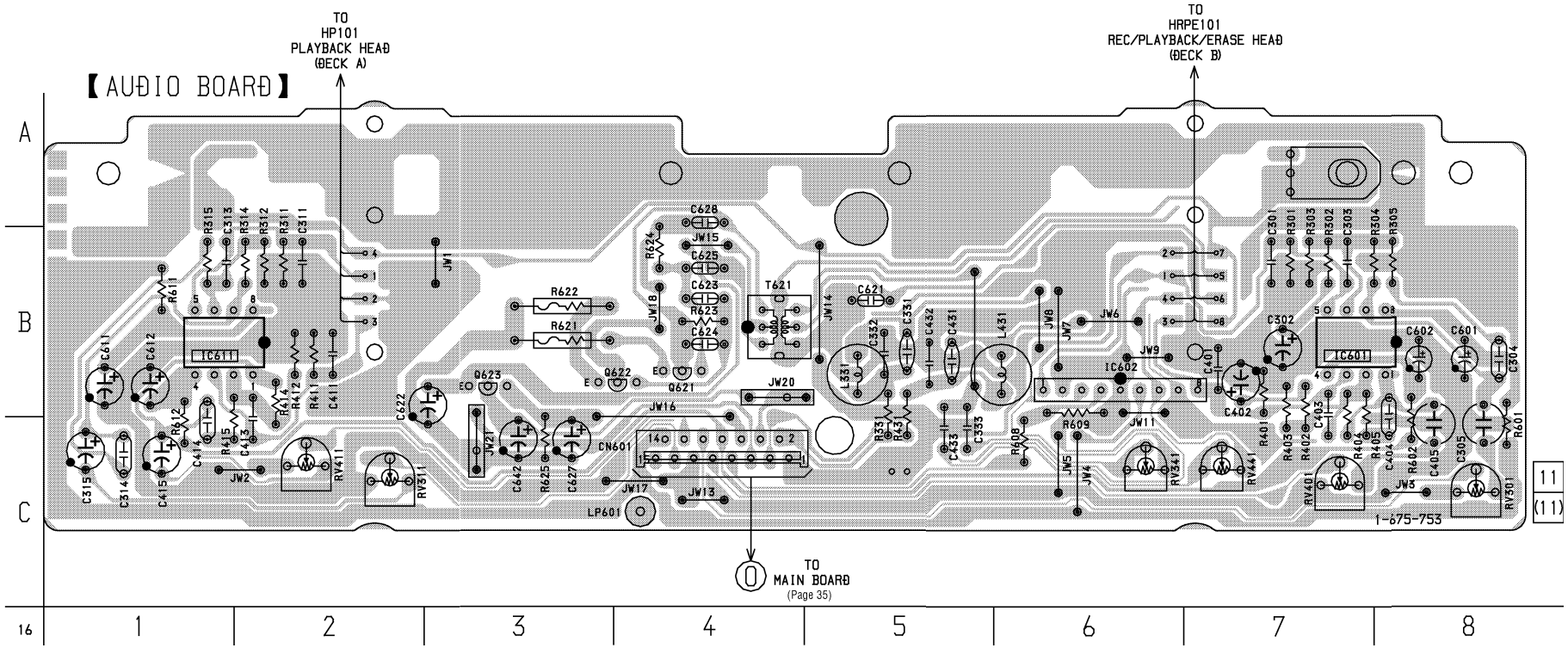
6-6. SCHEMATIC DIAGRAM SENSOR/MOTOR Section


SENSOR BOARD
SENSOR 2 BOARD
OUT SW BOARD
IN SW BOARD
INT/COUNT SW BOARD
【CONNECTOR BOARD】
CLAMP MOTOR BOARD
LOAD MOTOR BOARD
IC701
ELEVATOR UP/DOWN MOTOR DRIVE
IC702
LOADING MOTOR DRIVE
Q701 RT1N141S-TP LEVEL SHIFT
S701 (ON:WHEN TRAY IS GOING TO OPEN/CLOSE
S702 (ON:WHEN CD LID IS CLOSE)
S703 (ON:WHEN SUB TRAY MOVE BETWEEN TRAY AND STOCKER
S704 (ON:WHEN SUB TRAY SET TO PLAY POSITION
S705 (ON:WHEN ELEVATOR DOWN TO BOTTOM
S706 (ON:WHEN ELEVATOR UP/DOWN EACH SUB TRAY STOCK POSITION
S707 ROTARY ENCODER (DISC TRAY ADDRESS DETECT
S708 (ON:WHEN TRAY IS OPEN)
M701 (ELEVATOR UP/DOWN)
M702 (LOADING)
TO MAIN BOARD (Page 37)
TO MAIN BOARD (Page 37)

- Voltages are dc with respect to ground under no-signal conditions.
  no mark : CD STOP

6-7. PRINTED WIRING BOARD AUDIO Board

• See page 24 for Circuit Boards Location.

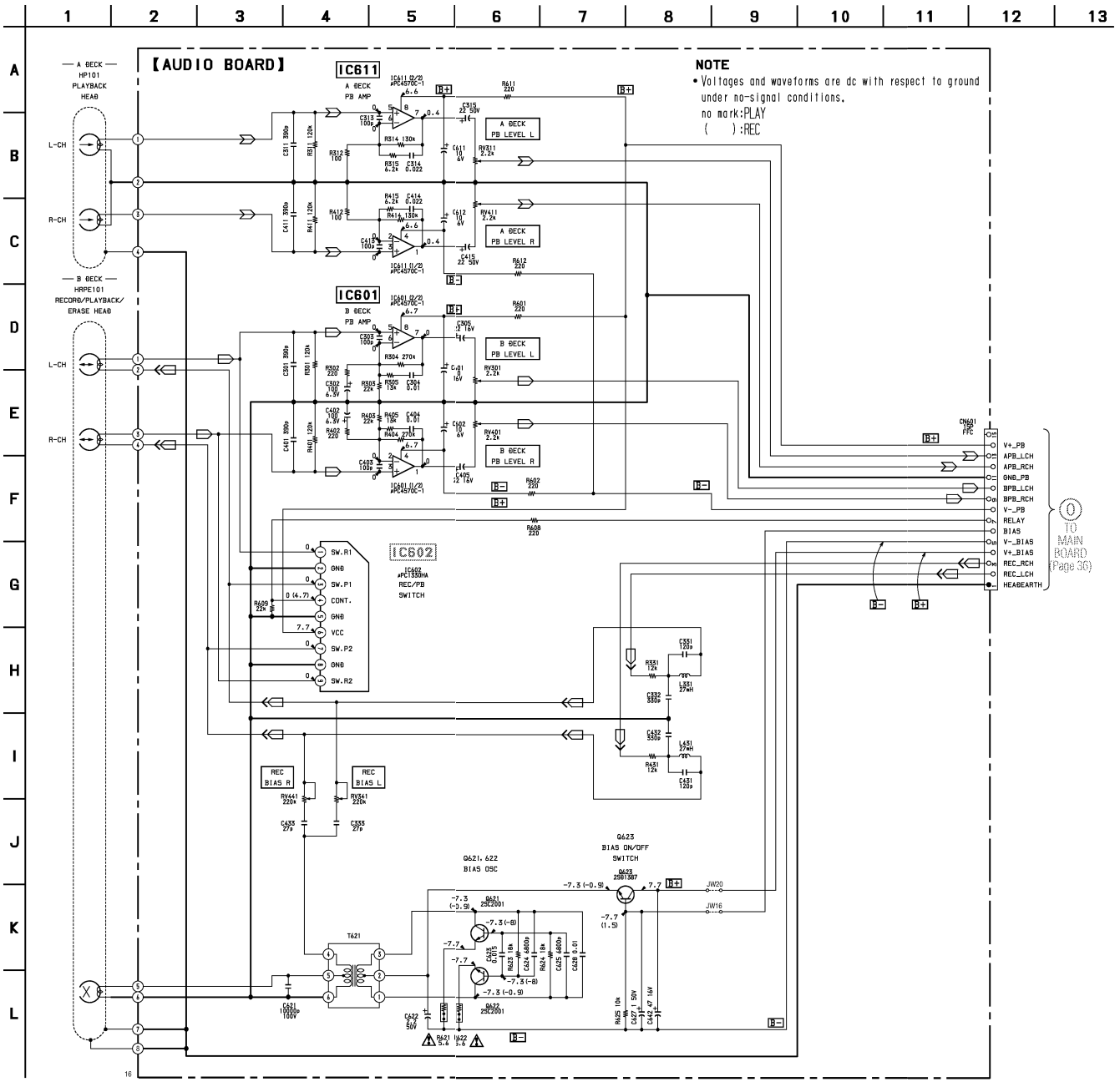


• **Semiconductor Location**

Ref. No.	Location
IC601	B-7
IC602	B-6
IC611	B-1
Q621	B-4
Q622	B-4
Q623	B-3

6-8. SCHEMATIC DIAGRAM AUDIO Board

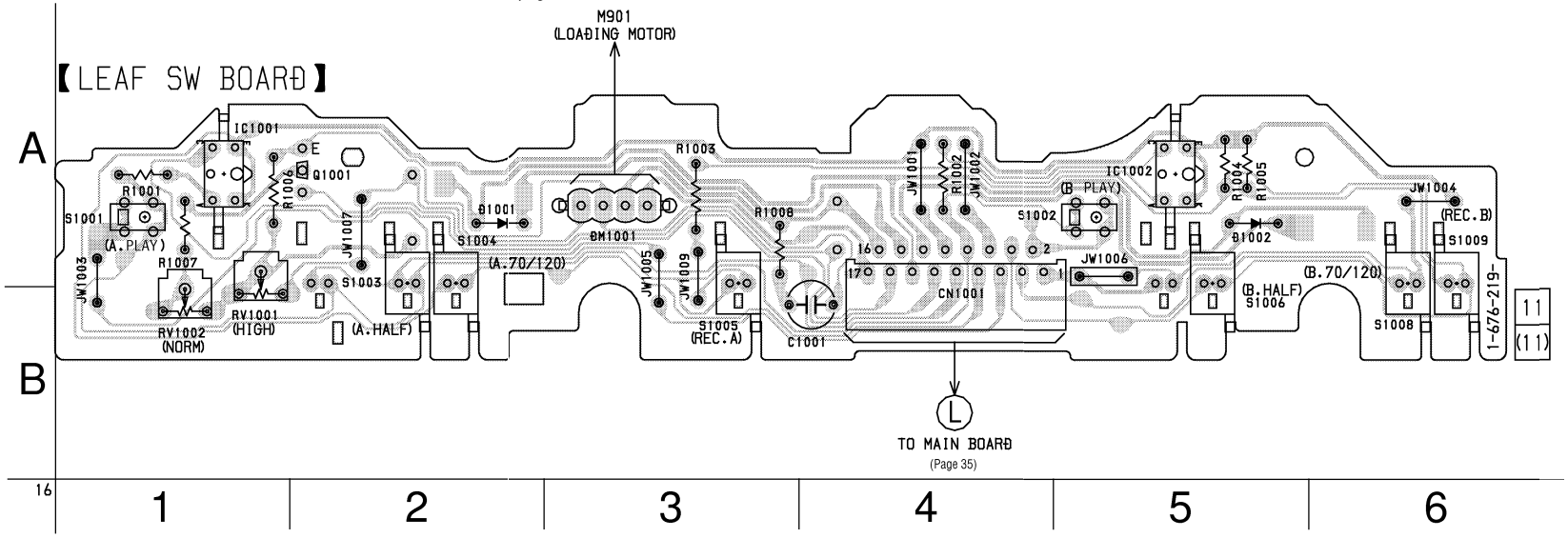
• See page 50 for IC Block Diagrams.



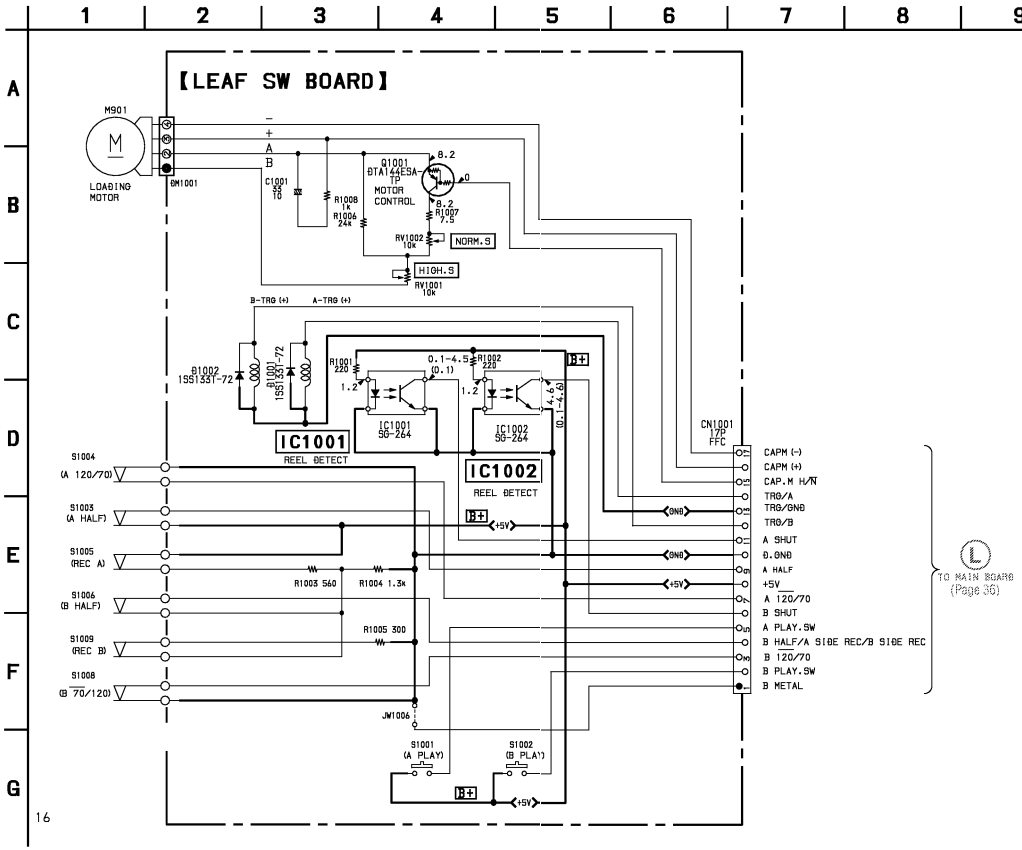
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-9. PRINTED WIRING BOARD LEAF SW Board

• See page 24 for Circuit Boards Location.



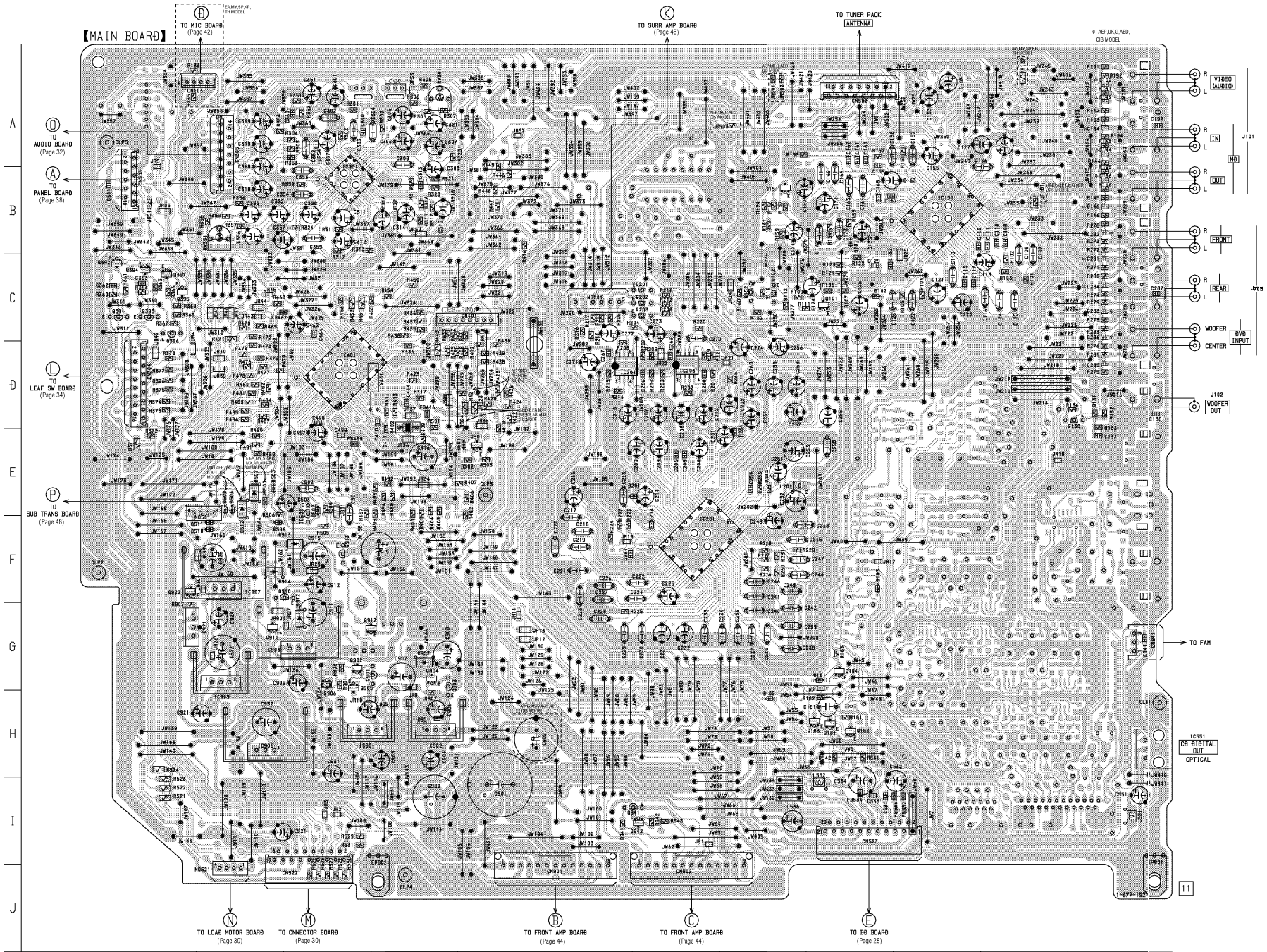
6-10. SCHEMATIC DIAGRAM LEAF SW Board



• Voltages are dc with respect to ground under no-signal conditions.
no mark : TAPE PLAY
( ) : RECORD

6-11. PRINTED WIRING BOARD MAIN Board

• See page 24 for Circuit Boards Location.

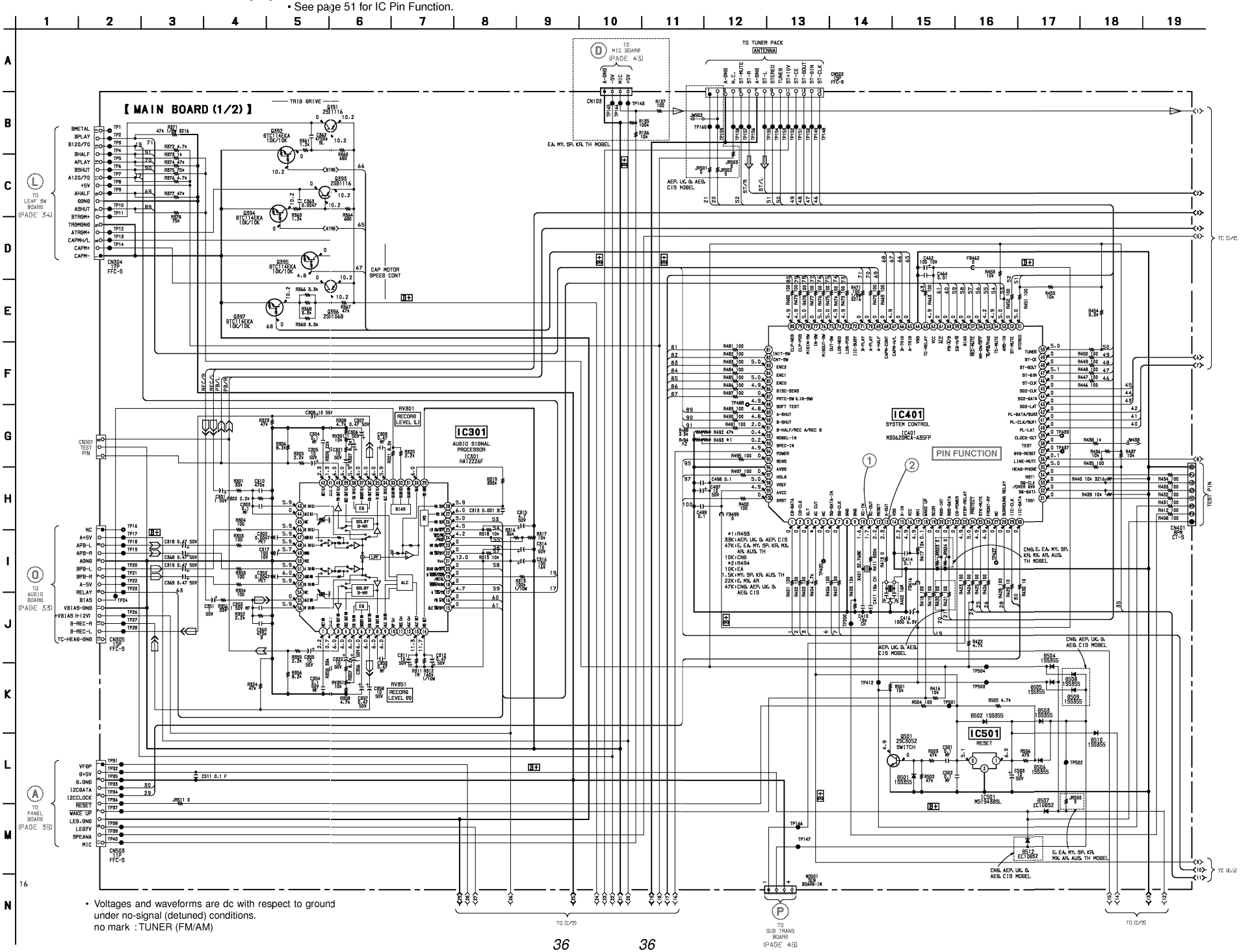


• Semiconductor Location

Ref. No.	Location
D101	B-10
D102	C-10
D181	G-10
D182	G-9
D183	F-10
D501	E-6
D502	E-4
D503	E-3
D504	E-3
D506	F-3
D507	E-3
D508	E-3
D510	F-3
D512	E-3
D912	G-4
D913	F-4
D914	F-3
D951	H-5
D952	G-5
IC101	B-11
IC201	E-8
IC203	D-8
IC204	D-7
IC301	B-4
IC401	D-4
IC501	F-4
IC551	H-13
IC901	H-4
IC902	H-5
IC903	G-4
IC905	G-3
IC906	H-3
IC907	F-3
Q101	C-10
Q102	C-9
Q130	D-13
Q151	B-9
Q152	C-9
Q181	H-10
Q182	H-10
Q183	H-10
Q184	G-10
Q201	C-8
Q202	C-8
Q203	C-8
Q391	C-1
Q392	C-1
Q393	C-2
Q394	C-2
Q395	C-2
Q396	C-2
Q397	C-2
Q501	E-6
Q901	G-5
Q902	G-4
Q903	G-5
Q904	G-5
Q905	G-5
Q906	G-4
Q910	G-4
Q911	G-3
Q912	G-5
Q913	F-4
Q921	G-2
Q922	F-2
Q941	I-8
Q942	I-8

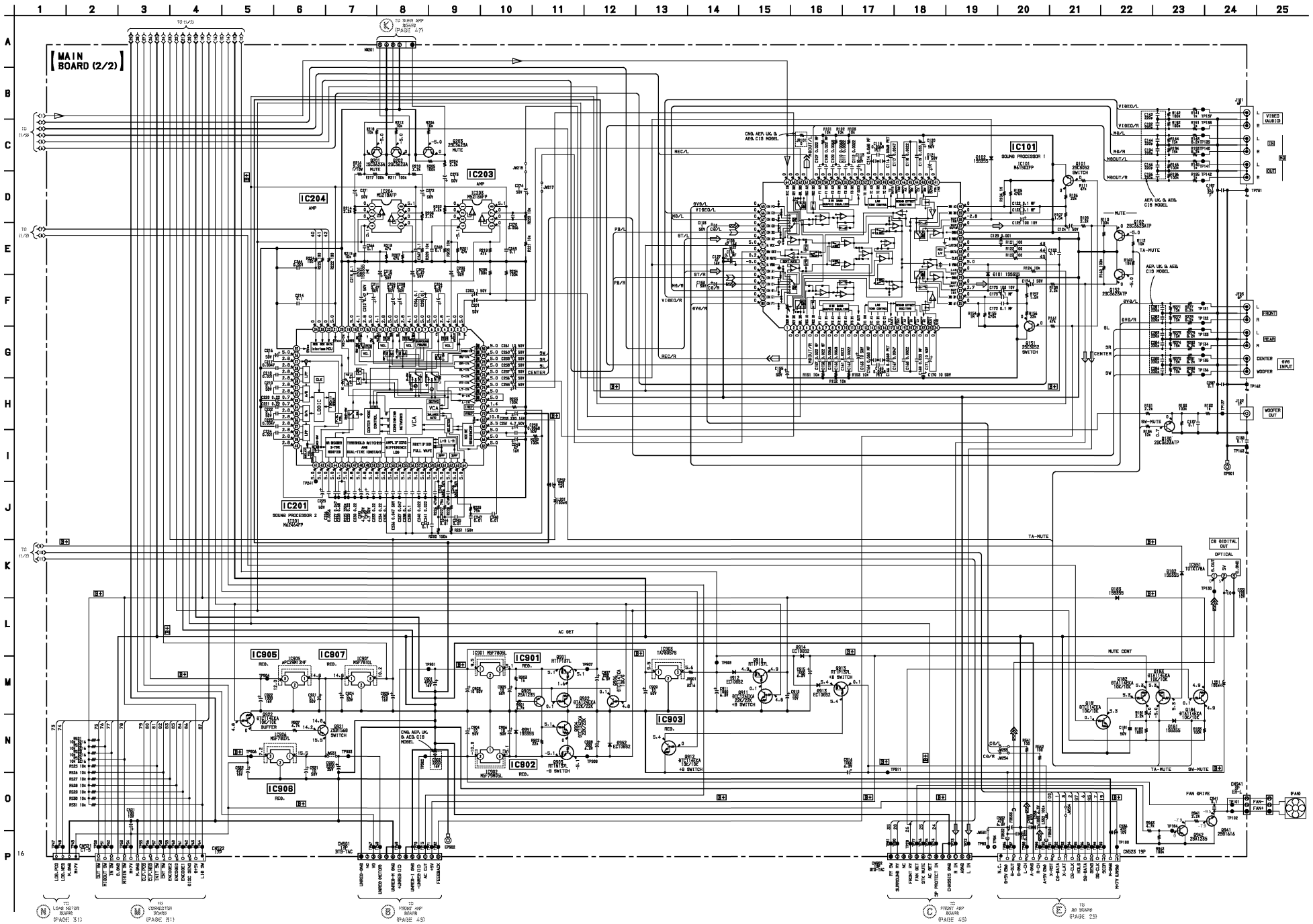
6-12. SCHEMATIC DIAGRAM MAIN Board (1/2)

• See page 42 for Waveforms.
• See page 51 for IC Pin Function.


【 MAIN BOARD (1/2) 】
IC301
AUDIO SIGNAL PROCESSOR
IC401
SYSTEM CONTROL
PIN FUNCTION
IC501
RESET
TO MIC BOARD (PAGE 43)
TO TUNER PACK
ANTENNA
TO LEAF SW BOARD (PAGE 54)
TO AUDIO BOARD (PAGE 53)
TO PANEL BOARD (PAGE 39)
TO SUB TRANS BOARD (PAGE 49)
CAP MOTOR SPEED CONT
RECORD LEVEL (L)
RECORD LEVEL (R)
TEST PIN
EA, MY, SP, KR, TH MODEL
AEP, UK, G, AEG, CIS MODEL
CNB, E, EA, MY, SP, KR, MX, AR, AUS, TH MODEL
CNB, AEP, UK, G, AEG, CIS MODEL
E, EA, MY, SP, KR, MX, AR, AUS, TH MODEL

- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : TUNER (FM/AM)

6-13. SCHEMATIC DIAGRAM MAIN Board (2/2)

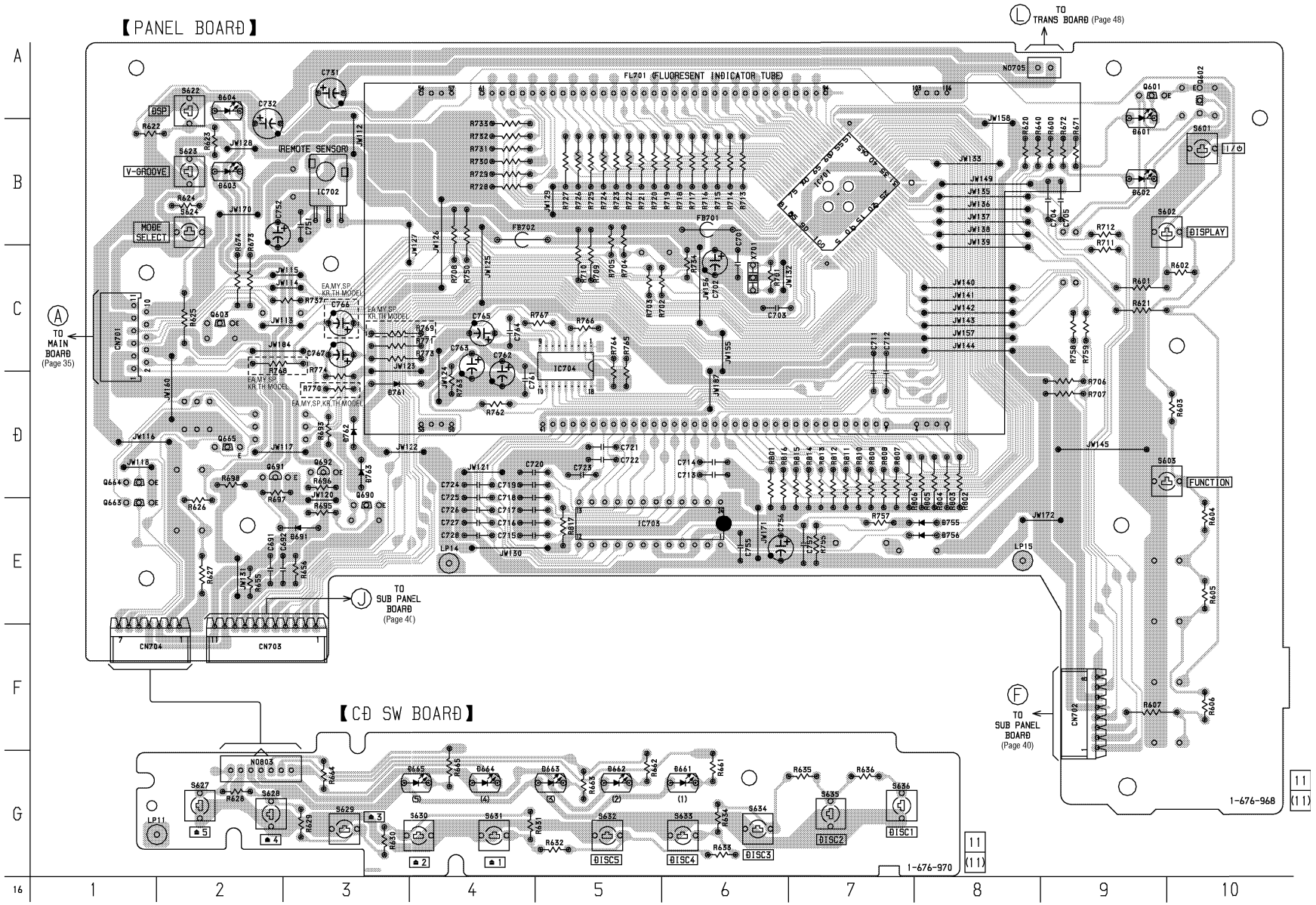


6-14. PRINTED WIRING BOARD PANEL Board

• See page 24 for Circuit Boards Location.

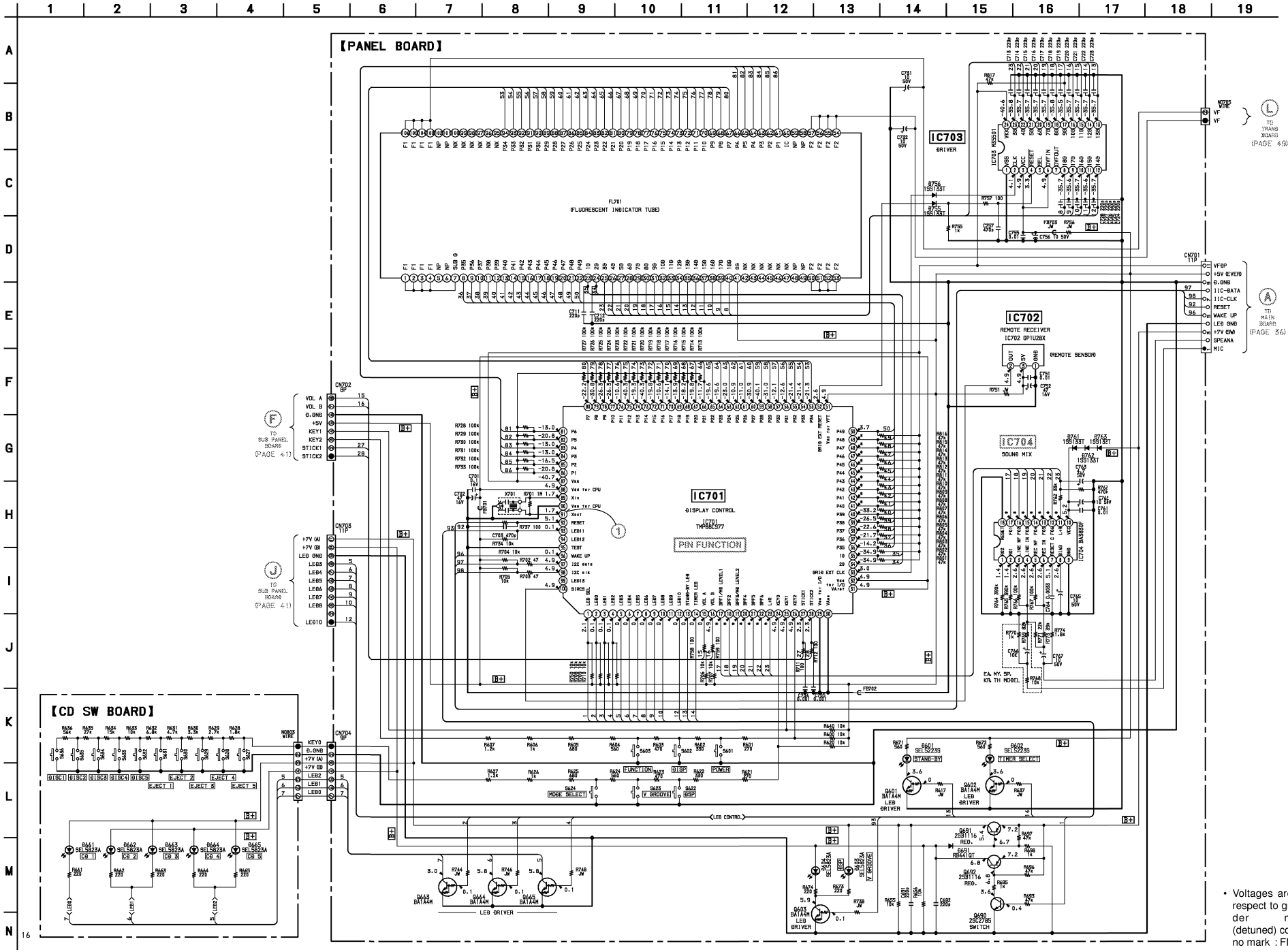
• **Semiconductor Location**

Ref. No.	Location
D601	B-9
D602	B-9
D603	B-2
D604	B-2
D661	G-6
D662	G-5
D663	G-5
D664	G-4
D665	G-4
D691	E-3
D755	E-8
D756	E-8
D761	D-3
D762	D-3
D763	D-3
IC701	B-7
IC702	B-3
IC703	E-5
IC704	C-5
Q601	A-10
Q602	A-10
Q603	C-2
Q663	E-1
Q664	D-1
Q665	D-2
Q690	E-3
Q691	D-2
Q692	D-3



6-15. SCHEMATIC DIAGRAM PANEL Board

- See page 42 for Waveforms.
- See page 50 for IC Block Diagrams.
- See page 53 for IC Pin Function.



- Voltages are dc with respect to ground under no-signal (detuned) conditions.
no mark : FM

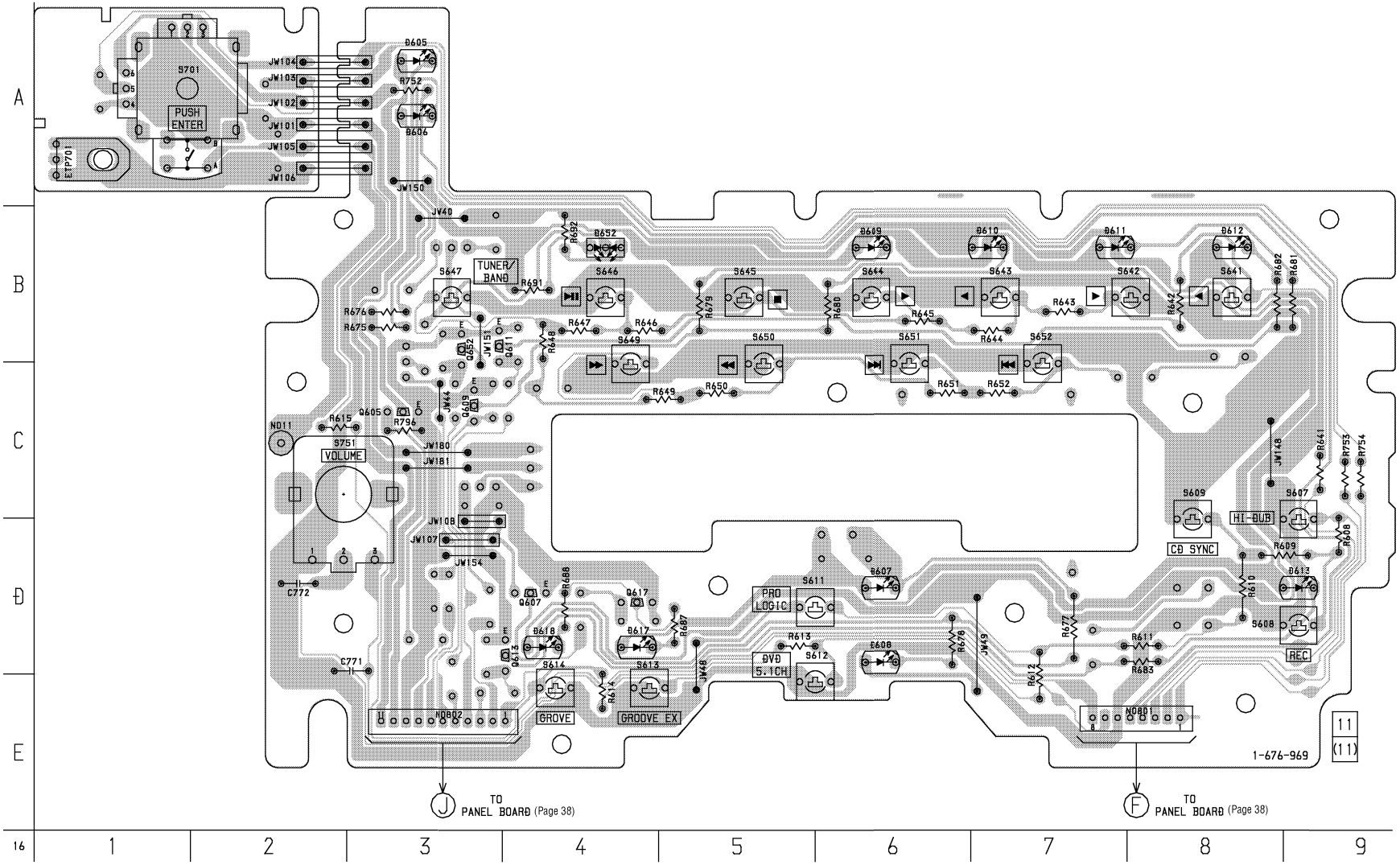
6-16. PRINTED WIRING BOARD SUB PANEL Board

• See page 24 for Circuit Boards Location.

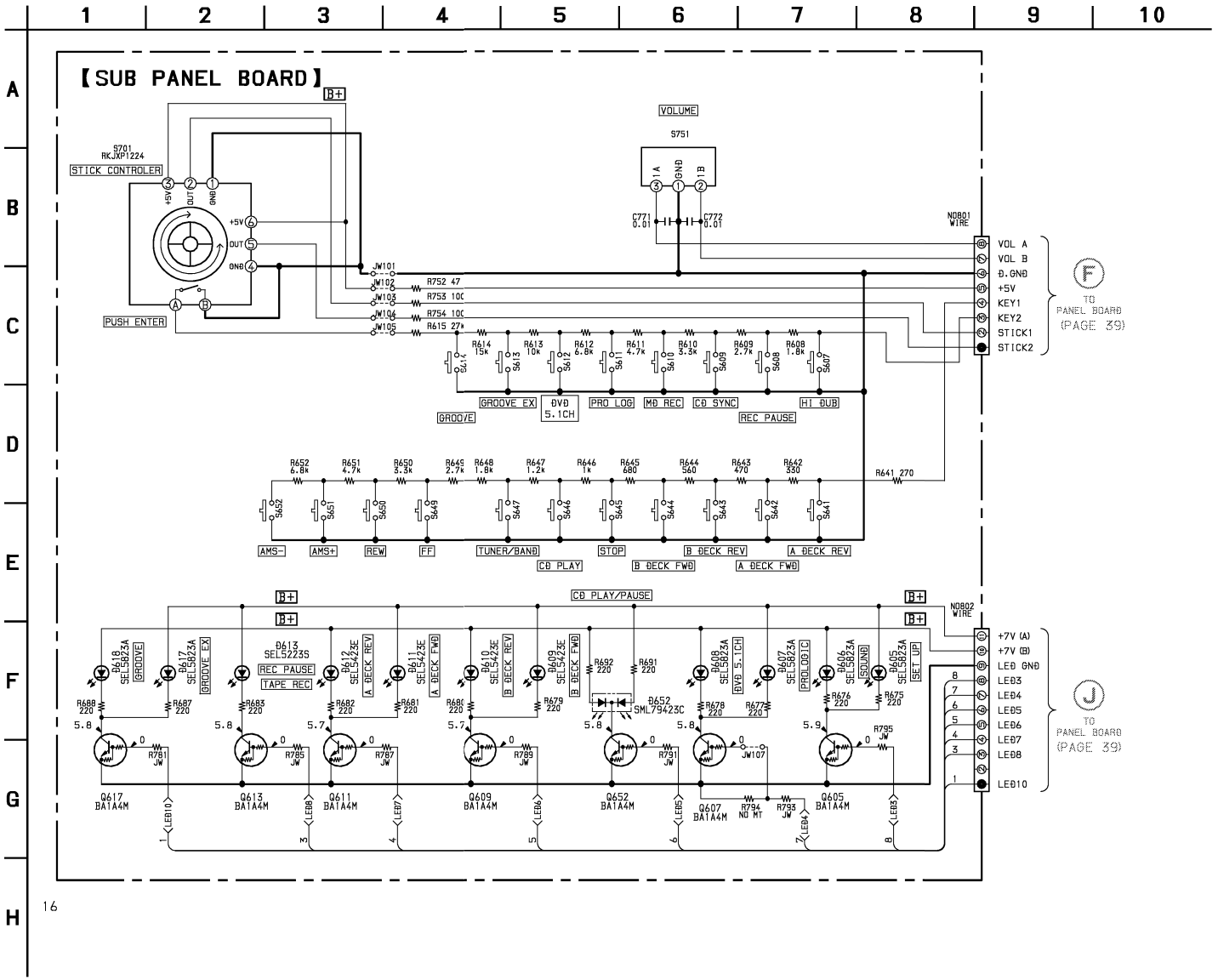
• **Semiconductor Location**

Ref. No.	Location
D605	A-3
D606	A-3
D607	D-6
D608	D-6
D609	B-6
D610	B-7
D611	B-7
D612	B-8
D613	D-9
D617	D-4
D618	D-4
D652	B-4
Q605	C-3
Q607	D-4
Q609	C-3
Q611	B-4
Q613	D-4
Q617	D-4
Q652	B-3

【SUB PANEL BOARD】



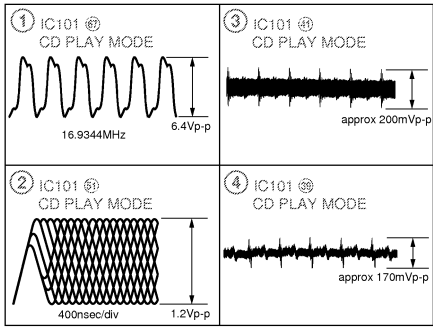
6-17. SCHEMATIC DIAGRAM SUB PANEL Board



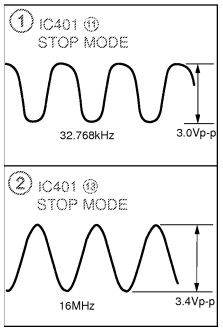
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM

6-18. WAVEFORMS

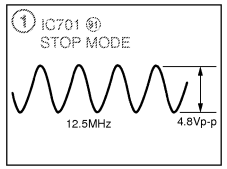
– BD BOARD –



– MAIN BOARD –

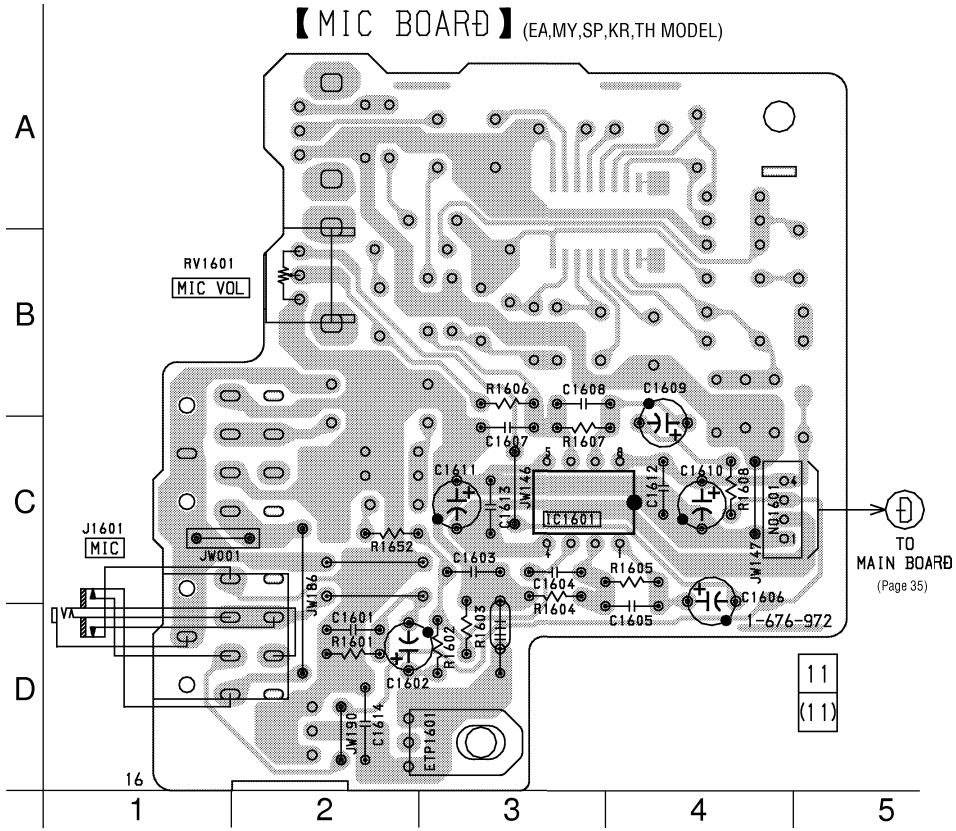


– PANEL BOARD –

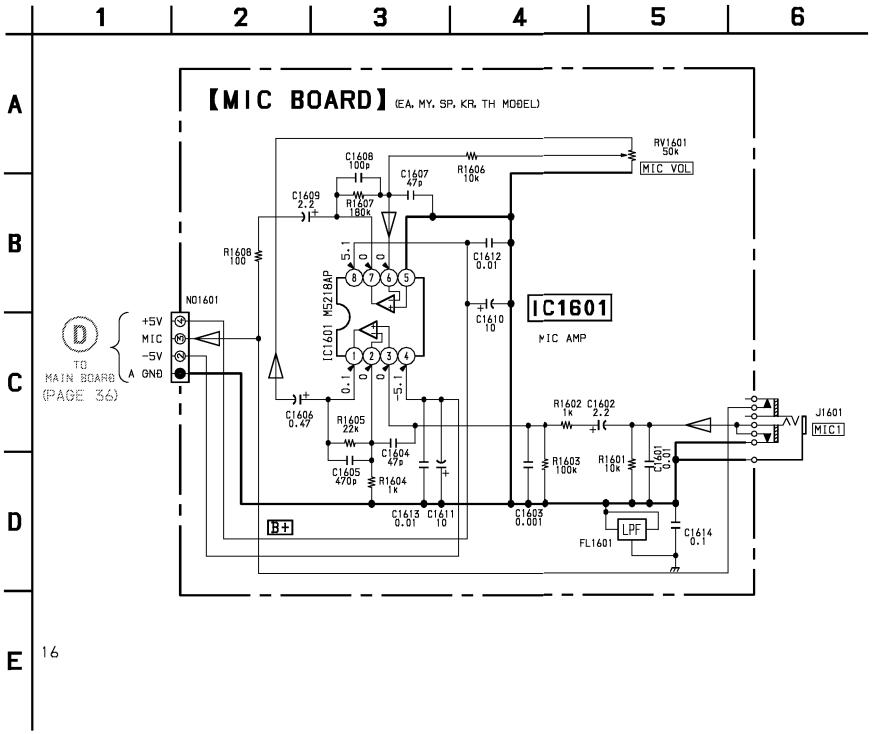


6-19. PRINTED WIRING BOARD MIC Board

• See page 24 for Circuit Boards Location.



6-20. SCHEMATIC DIAGRAM MIC Board



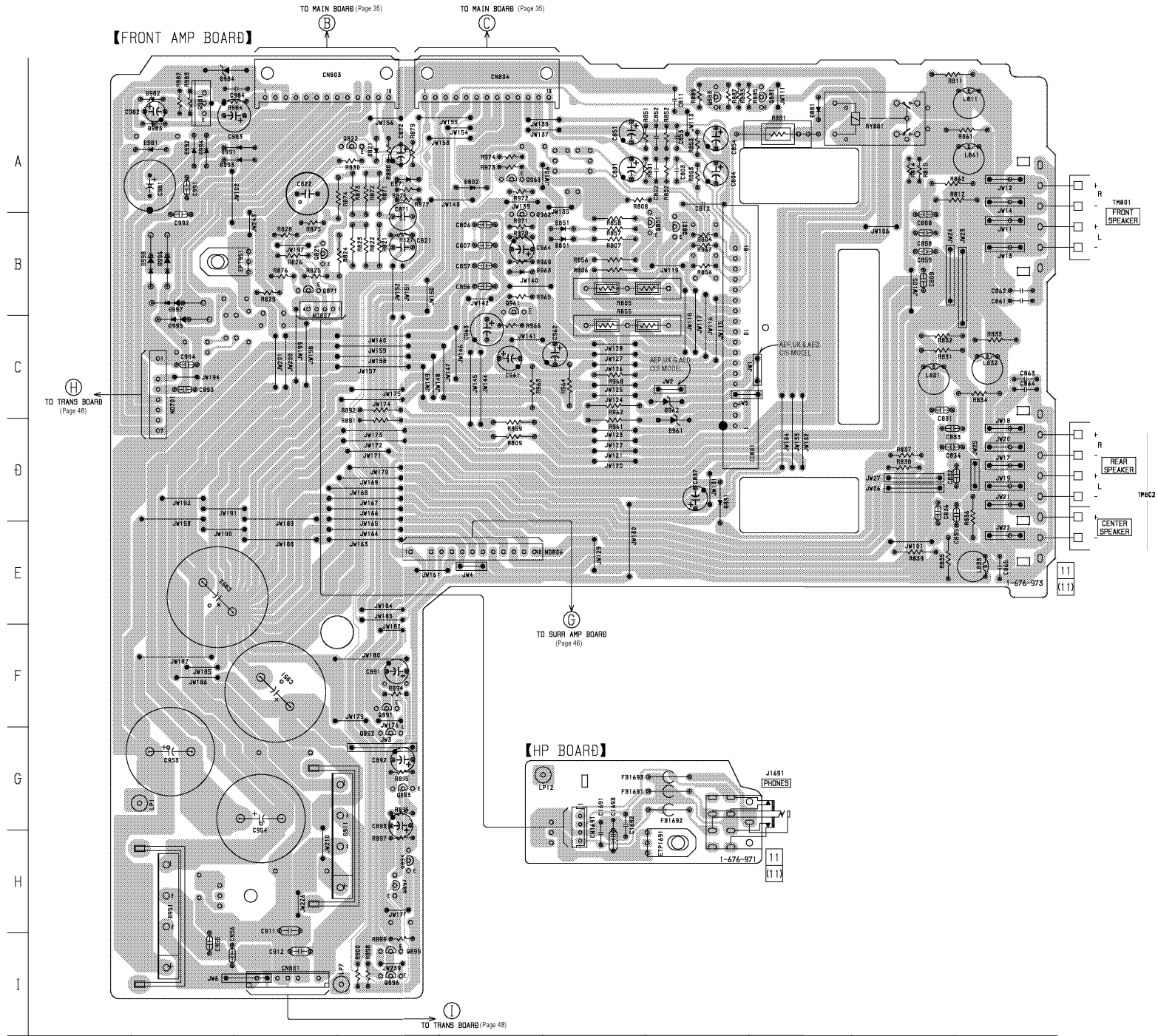
• Voltages are dc with respect to ground under no-signal (detuned) conditions.
no mark : FM

6-21. PRINTED WIRING BOARD FRONT AMP Board

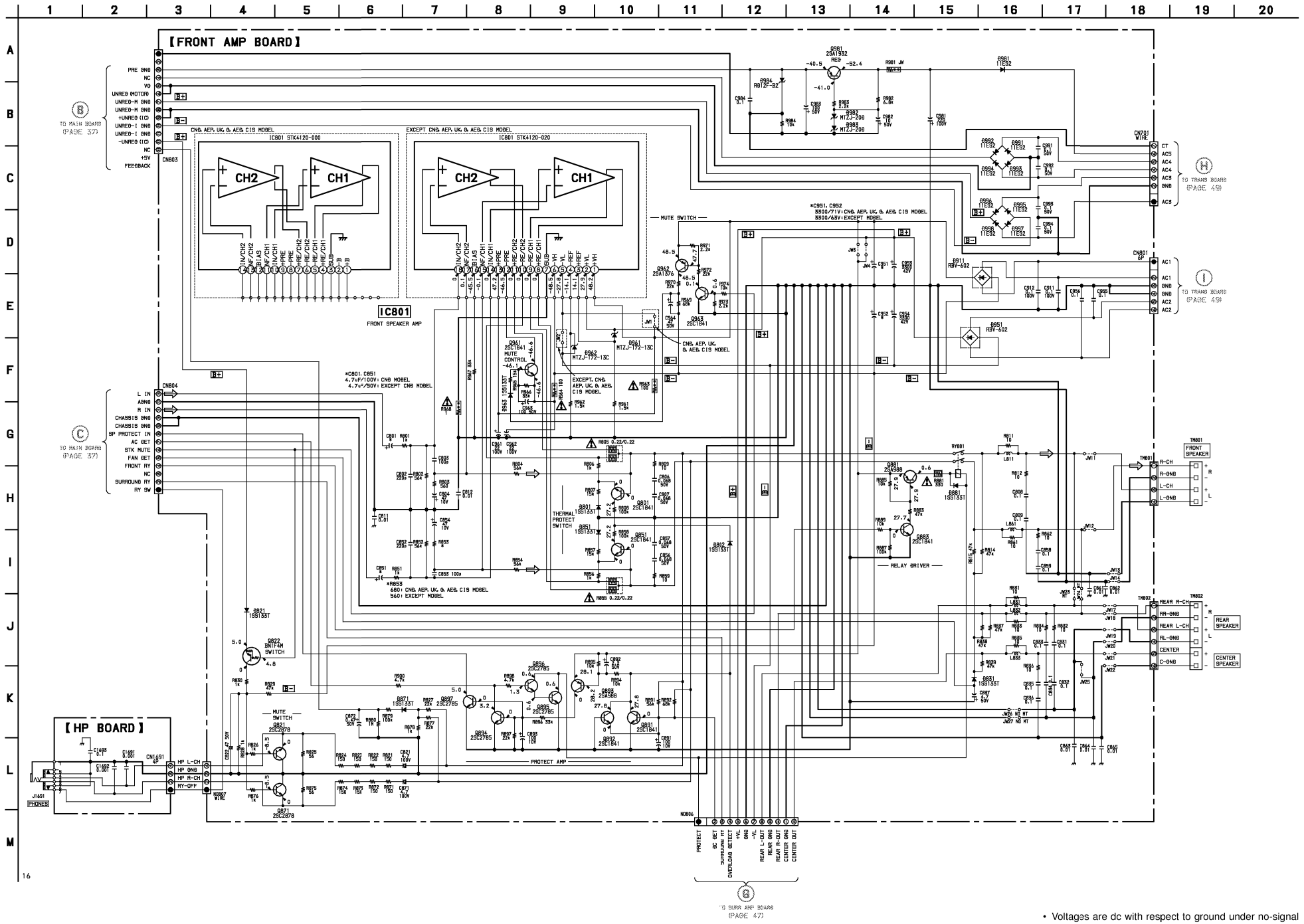
• See page 24 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location
D801	B-6
D802	A-5
D821	A-4
D831	D-7
D851	B-6
D871	A-4
D881	A-8
D911	G-6
D951	H-2
D961	C-7
D962	C-7
D963	B-5
D981	A-2
D982	A-2
D983	A-2
D984	A-3
D991	A-3
D992	A-2
D993	A-3
D994	A-2
D995	B-2
D996	B-2
D997	B-2
D998	B-2
IC801	C-7
Q801	B-7
Q821	B-3
Q822	A-4
Q851	B-7
Q871	B-3
Q881	A-8
Q883	A-7
Q891	F-4
Q892	G-4
Q893	G-4
Q894	H-4
Q895	I-4
Q896	I-4
Q897	H-4
Q961	B-5
Q962	A-5
Q963	A-5
Q981	A-2



6-22. SCHEMATIC DIAGRAM FRONT AMP Board



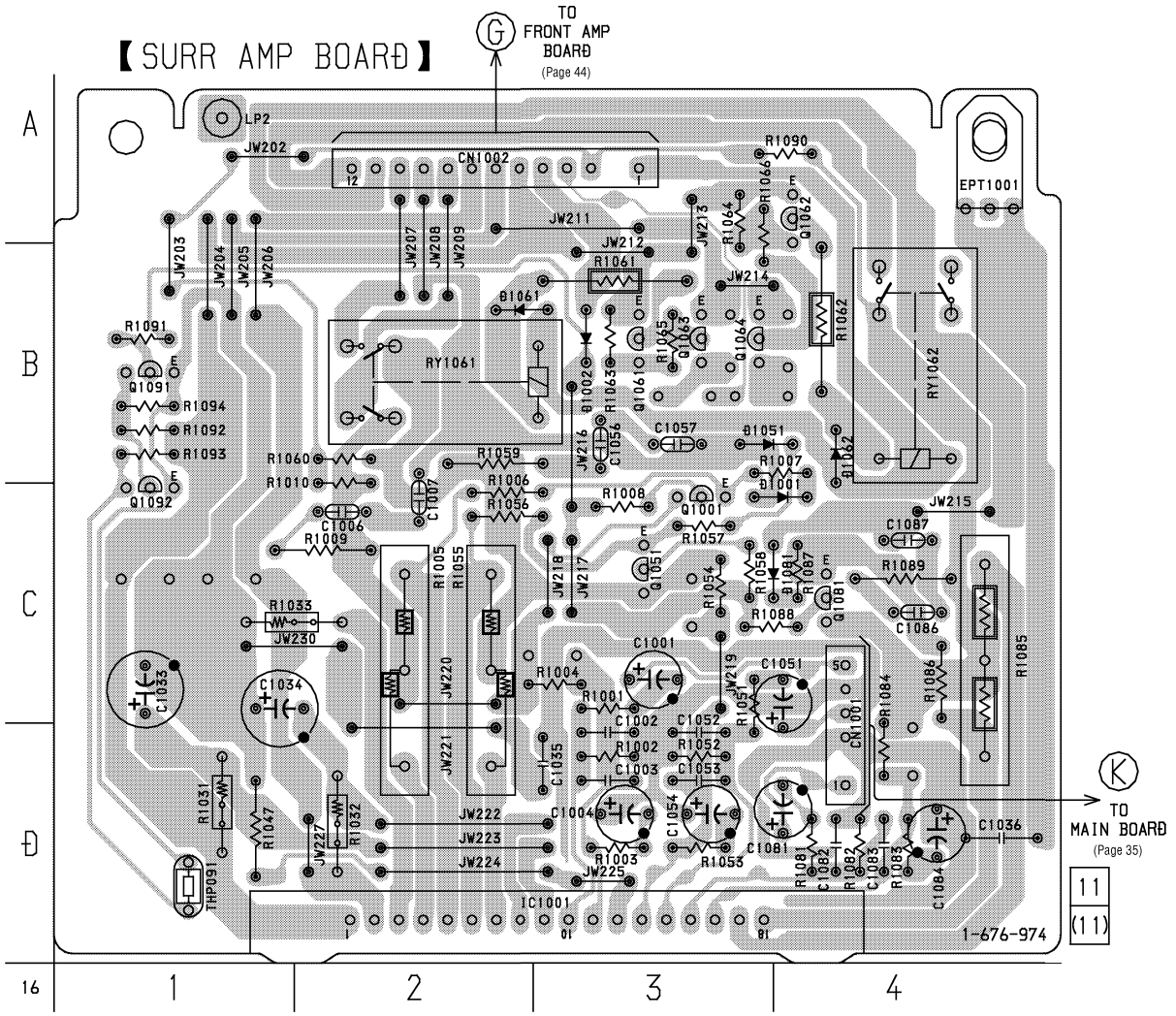
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM

6-23. PRINTED WIRING BOARD SURROUND AMP Board

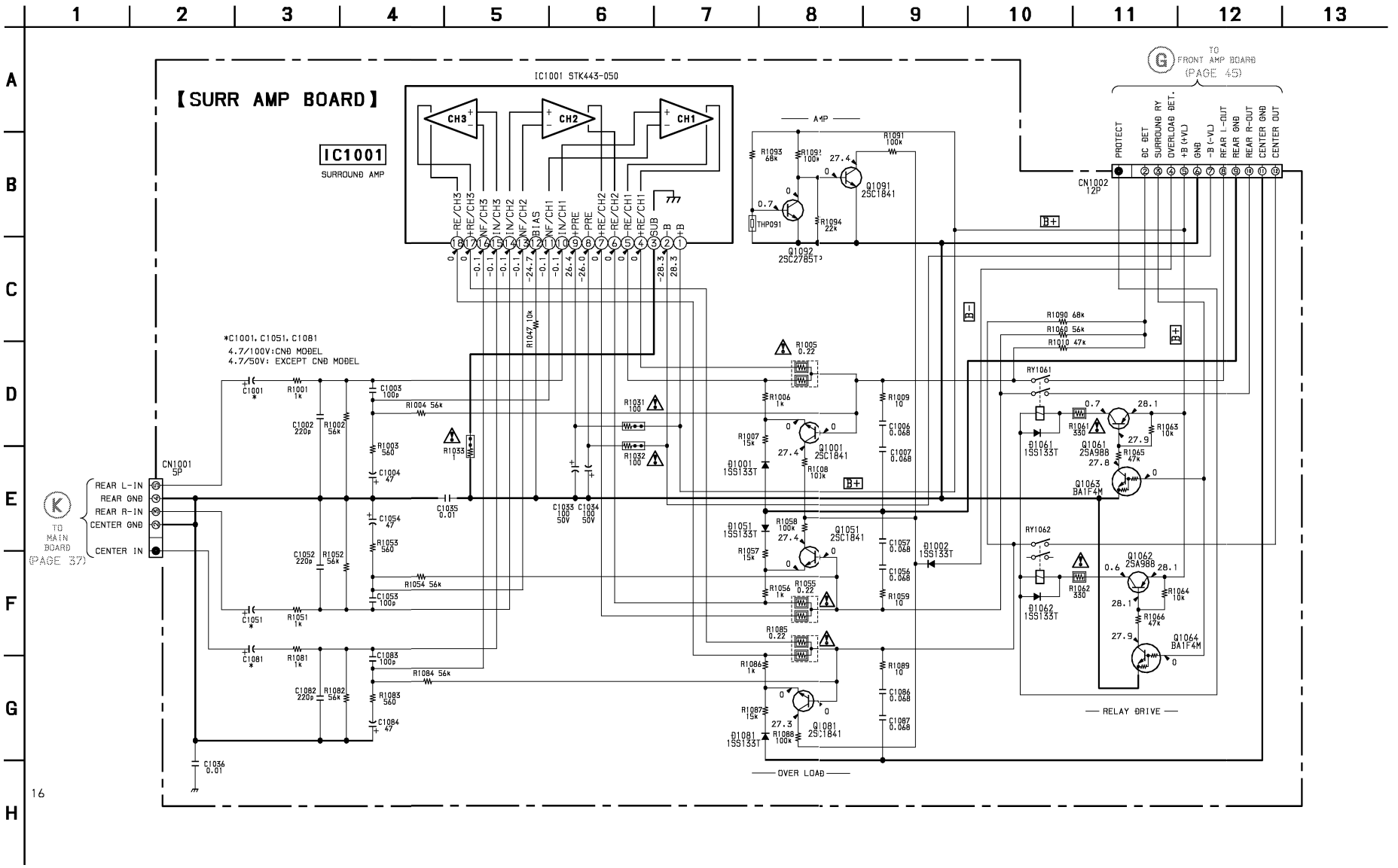
• See page 24 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D1001	C-4
D1002	B-3
D1051	B-3
D1061	B-2
D1062	B-4
D1081	C-4
IC1001	D-2
Q1001	C-3
Q1051	C-3
Q1061	B-3
Q1062	A-4
Q1063	B-3
Q1064	B-3
Q1081	C-4
Q1091	B-1
Q1092	C-1



6-24. SCHEMATIC DIAGRAM SURROUND AMP Board

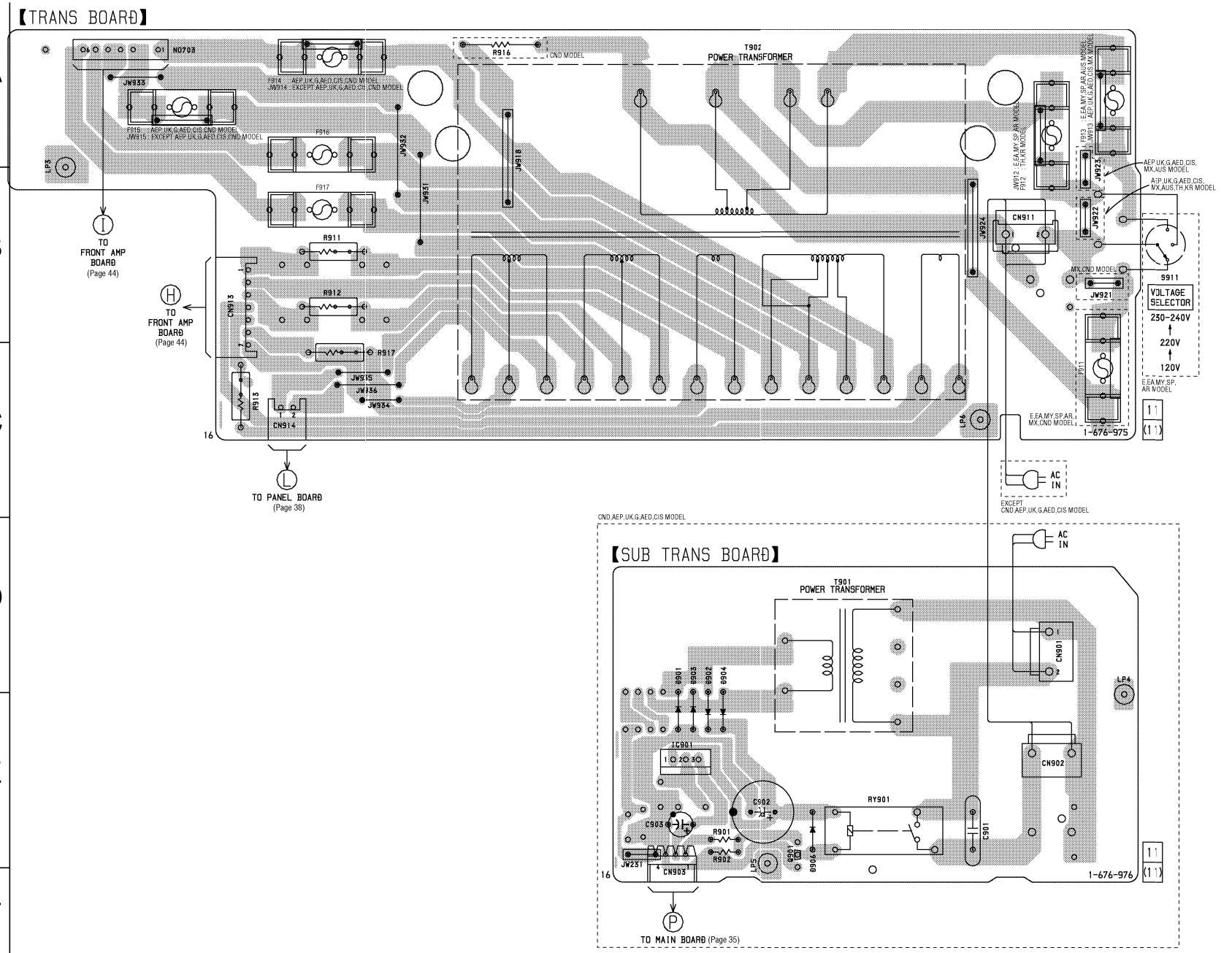


6-25. PRINTED WIRING BOARDS TRANS/SUB TRANS Boards

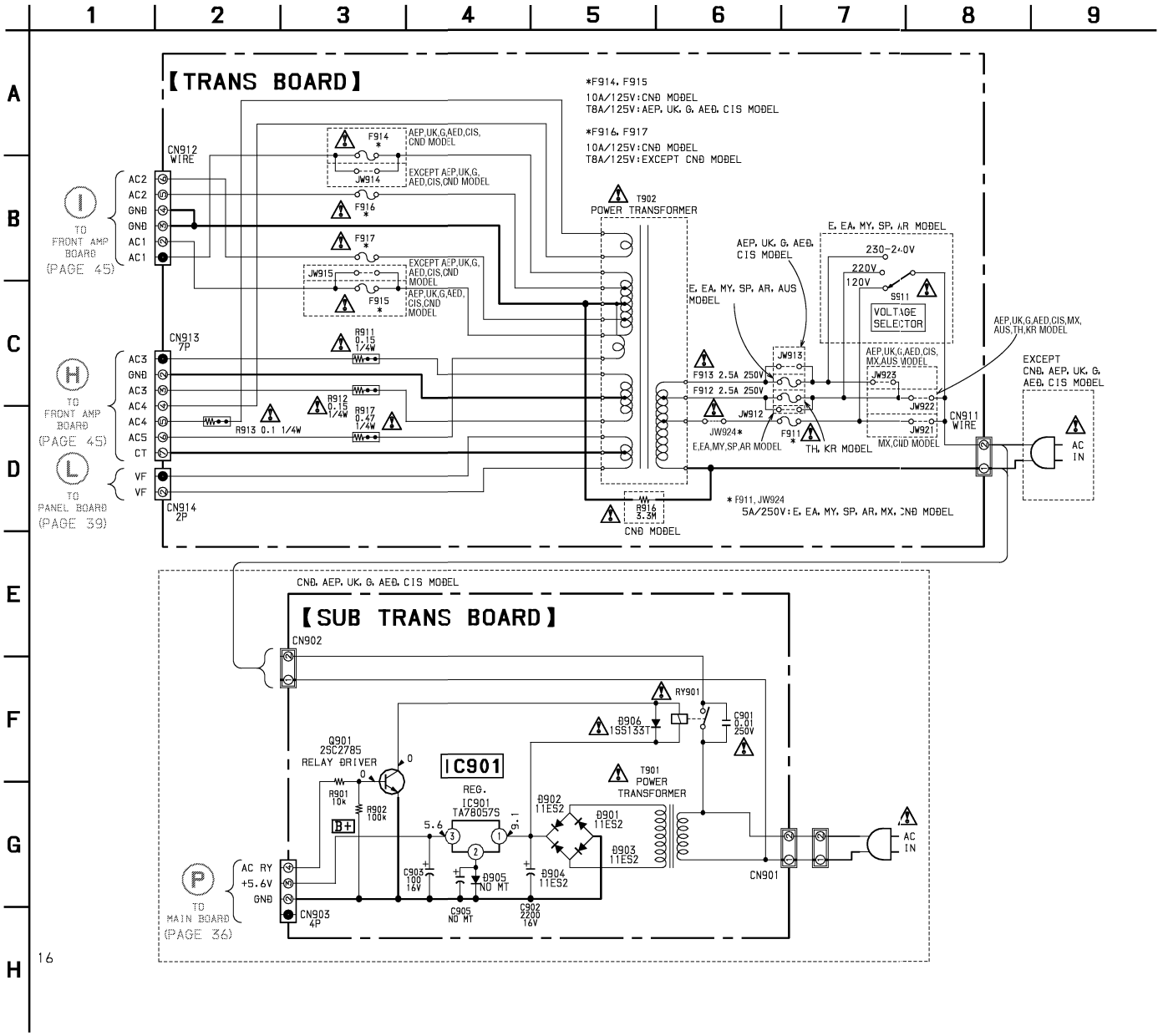
• See page 24 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location
D901	E-4
D902	E-5
D903	E-4
D904	E-5
D906	E-5
IC901	E-4



6-26. SCHEMATIC DIAGRAM TRANS/SUB TRANS Boards

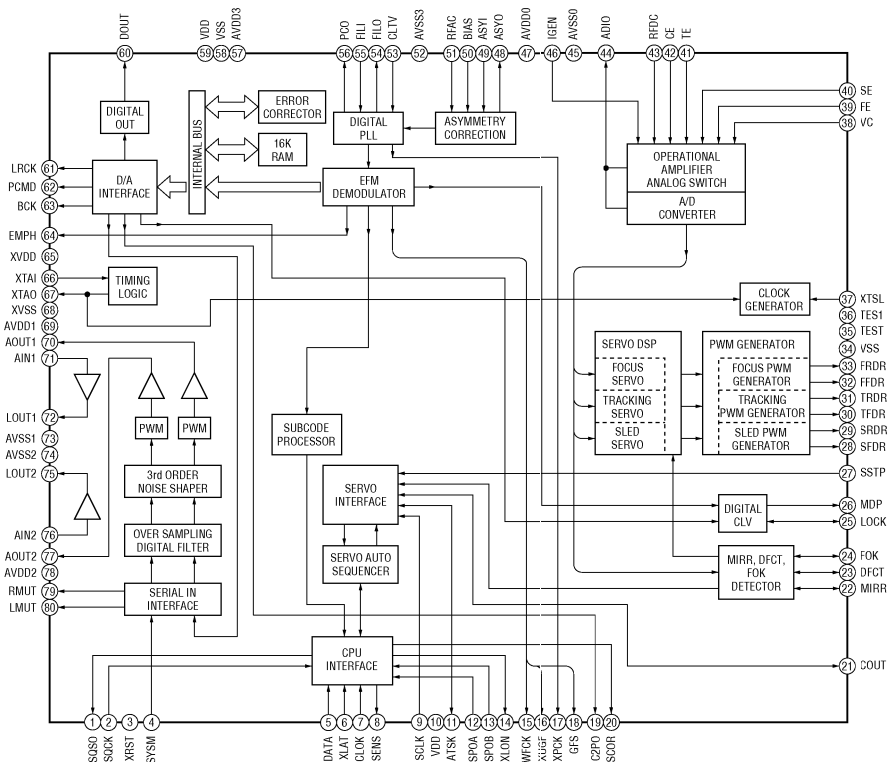


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

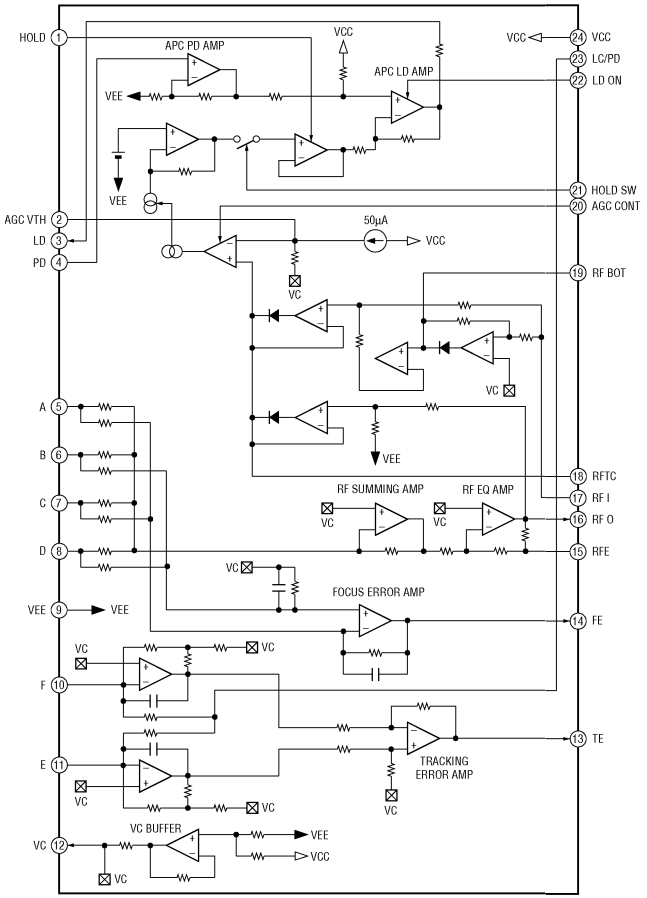
6-27. IC BLOCK DIAGRAMS

– BD Board –

IC101 CXD2587Q

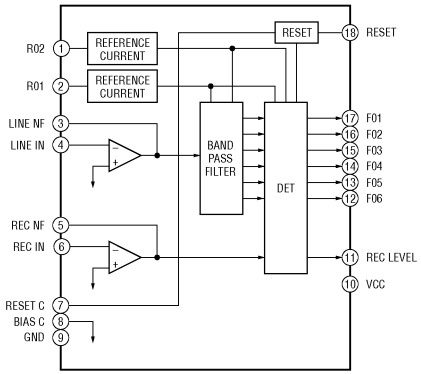


IC103 CXA2568M-T6



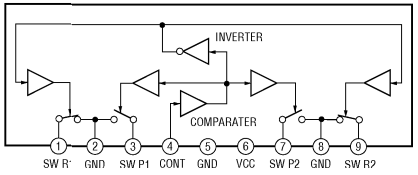
– PANEL Board –

IC704 BA3830F



– AUDIO Board –

IC602 µPC1330HA



50

6-28. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC401 M30620MCA-A35FP

Pin No.	Pin Name	I/O	Description
1	CD_DATA	O	BD data out
2	CD_CLK	O	BD clock
3	XLT	O	BD LAT
4	AC CUT	I	AC cut ON (L) / OFF (H) Check
5	CAN'T USE	O	Not used
6	SQ_DATA_IN	I	BD sub-Q Data in
7	SQ_CLK	I	BD sub-Q Clock
8	BYTE	—	EXT. Data bus width select input
9	CNVss	—	To FLASH connector 8 / Pull-down to Vss
10	Xcin	—	Sub clock in
11	Xcout	—	Sub clock out
12	RESET	—	To FLASH connector 9 / Reset
13	Xout	—	Main system clock out
14	Vss	—	Vss
15	Xin	—	Main system clock in (16 MHz)
16	Vcc	—	Power supply (+5 V)
17	NMI	I	Pull up (Ever +5 V) not used
18	WAKE_UP	I	Wake up (L)
19	SCOR	I	BD sub-Q request
20	RDS-INT	I	RDS INT
21	RDS-DATA	I	RDS data
22	CD-POWER	O	CD-Power ON (H) / OFF (L)
23	STBY-RELAY	O	Standby relay
24	PROTECT	I	Speaker protect ON (L) / OFF (H)
25	STK MUTE	O	STK ON (H) / OFF (L)
26	FRONT-RELAY	O	Front speaker relay
27	FAN CONTROL	I	Fan control (ZMD)
28	REAR-RELAY	O	Rear speaker relay
29	IIC_CLK	I	IIC SCL
30	IIC_DATA	I	IIC SDA
31	TxD1	O	To FLASH connector 2 / LDON (ZMD)
32	RxD1	O	To FLASH connector 7 / 1-2 (ZMD)
33	CLK1	O	To FLASH connector 6 / DVD_OVER (ZDVD) / DA-Mute (ZMD)
34	RTS1	O	To FLASH connector 3 / OPT_SEL (ZMD)
35	HEAD PHONE	I	Headphone detect Yes (H) / No (L)
36	LINE-MUTE	I/O	TA Line-Mute ON (H) / OFF (L)
37	OTM RESET	O	DVD If ucom reset / MDM power down
38	MC TEST	I/O	MC test normal (Open) / Test (L)
39	CLOCK-OUT	O	Clock check
40	PL-LAT	O	Pro-Logic latch
41	PL-CLK/SUR1	O	Pro-Logic clock / Surround 1
42	PL-DATA/SUR2	O	Pro-Logic data / Surround 2
43	502-LAT	O	M61502 latch
44	502-DATA	O	M61502 data
45	502-CLK	O	M61502 clock
46	ST-CLK	O	Tuner clock
47	ST-DIN	I	Tuner data in
48	ST-DOUT	O	Tuner data out
49	ST-CE	O	Tuner chip ENB
50	TUNED	I	Tuned IN (L) / OFF (H)

Pin No.	Pin Name	I/O	Description
51	STEREO	I	Stereo IN (L) / OFF (H)
52	ST-MUTE	O	Tuner mute
53	AMS-IN	I	AMS signal in (L) / OFF (H)
54	TC-MUTE	O	TC line mute on (H) / OFF (L)
55	R/PB/PAS	I	REC (L) / PB (Z) / Pass (H)
56	NR-ON/OFF	O	Dolby NR ON (H) / OFF (L)
57	REC-MUTE	O	REC mute ON (L) / OFF (H)
58	BIAS	O	Bias ON (H) / OFF (L)
59	EQ-H/N	O	EQ High (H) / Normal (L)
60	PB-A/B	O	TC A (L) / B (H) select
61	ALC	O	ALC ON (L) / OFF (H)
62	Vcc	—	Power supply (+5 V)
63	TC-RELAY	O	TC relay ON (H) / OFF (L)
64	Vss	—	Vss
65	A TRG	O	TCM-A trigger out ON (H) / OFF(L)
66	B TRG	O	TCM-B trigger out ON (H) / OFF(L)
67	CAPM-H/L	O	CAP-Motor High (H) / Low (L)
68	CAPM-CNT	O	CAP-Motor H (REV) / L (FWD) / L (Stop)
69	A HALF	I	A deck half
70	A PLAY	I	TCM-A play switch IN
71	B PLAY	I	TCM-B play switch IN
72	IIC-BUSY	I	IIC_Busy
73	LOD-POS	O	CDM53 loading tray motor output
74	LOD-NEG/xHOLD	O	CDM53 loading tray motor output (P down for FLASH)
75	OUT_SW	I	CDM53 loading system switch
76	MIDOUT_SW	I	CDM53 loading system switch
77	IN_SW	I	CDM53 loading system switch
78	MIDIN_SW	I	CDM53 loading system switch
79	CLP-POS	O	CDM53 clamper motor output
80	CLP-NEG	O	CDM53 clamper motor output
81	INIT_SW	I	CDM53 elevator system switch
82	CNT-SW	I	CDM53 elevator system switch
83	ENC2/xWR	I	CDM53 clamper system encoder 2 (PUP for FLASH)
84	ENC1	I	CDM53 clamper system encoder 1
85	ENC0	I	CDM53 clamper system encoder 0
86	DISC-SENS	I	CDM53 disc sensor input
87	PRTC_SW	I	CDM53 protector switch
88	SOFT-TEST	O	Soft check out
89	A SHUT	I	TCM-A reel pulse
90	B SHUT	I	TCM-B reel pulse
91	B HALF/REC A/REC B	I	B Half / REC A / REC B switch
92	MODEL-IN	I	Model IN
93	SPEC-IN	I	Spec IN
94	POWER	O	Power ON (H) / OFF (L)
95	SENS	I	BD sensor input
96	Avss	—	Analog ground
97	HOLD	O	BD laser power control
98	Vref	—	Analog Reference Voltage
99	Avcc	—	Analog Power Supply
100	XRST	O	BD reset

• PANEL BOARD IC701 TMP88CS77AF-1A84 (FLUORESCENT INDICATOR TUBE DRIVE, LED DRIVE, KET CONTROL)

Pin No.	Pin Name	I/O	Description
1	LED SEL	O	LED select switch(for dynamic)
2 to 12	LED0 to LED10	O	LED (high active)
13	STANDBY LED	O	Standby LED
14	TIMER LED	O	Timer SEL LED
15	VOLUME A	I	Volume A
16	VOLUME B	I	Volume B
17	Super Low Freq (BPF 0)	I	for KEY in(AD)
18 to 22	BPF1 to BPF5	I	for KEY in(AD)
23	ALL BAND	I	for KEY in(AD)
24 to 26	KEY 0 to KEY2	I	for KEY in(AD)
27	STICK 1	I	Stick control Up / Down
28	STICK 2	I	SStick control Right / Left
29	Vss for I/O	—	Vss
30	VAss	—	VAss
31	VAref	—	VAref
32	Vdd for I/O	—	Vdd
33	GRID EXT CLK	O	for Grid extender
34	2G	O	for FL
35	1G	O	for FL
36 to 50	P35 to P49	O	for FL
51	Vdd for VFT	—	Vdd
52	GRID EXT RESET	O	for Grid extender
53 to 86	P34 to P1	O	for FL
87	Vkk	—	Vkk
88	Vdd for CPU	—	Vdd
89	Xin	I	12.5 MHz (Xin)
90	Vss for CPU	—	Vss
91	Xout	O	12.5 MHz (Xout)
92	RESET	I	Reset (low active)
93	LED11	O	LED (high active)
94	LED12	O	LED (high active)
95	TEST	I	Not used (ground)
96	WAKE UP	O	other ucom wake-up port (PULL UP)
97	I2C data	O	IIC SDA
98	I2C clk	O	IIC SCL
99	LED13	O	LED (high active)
100	SIRCS	I	Remote commander input (input capture)

SECTION 7
EXPLODED VIEWS

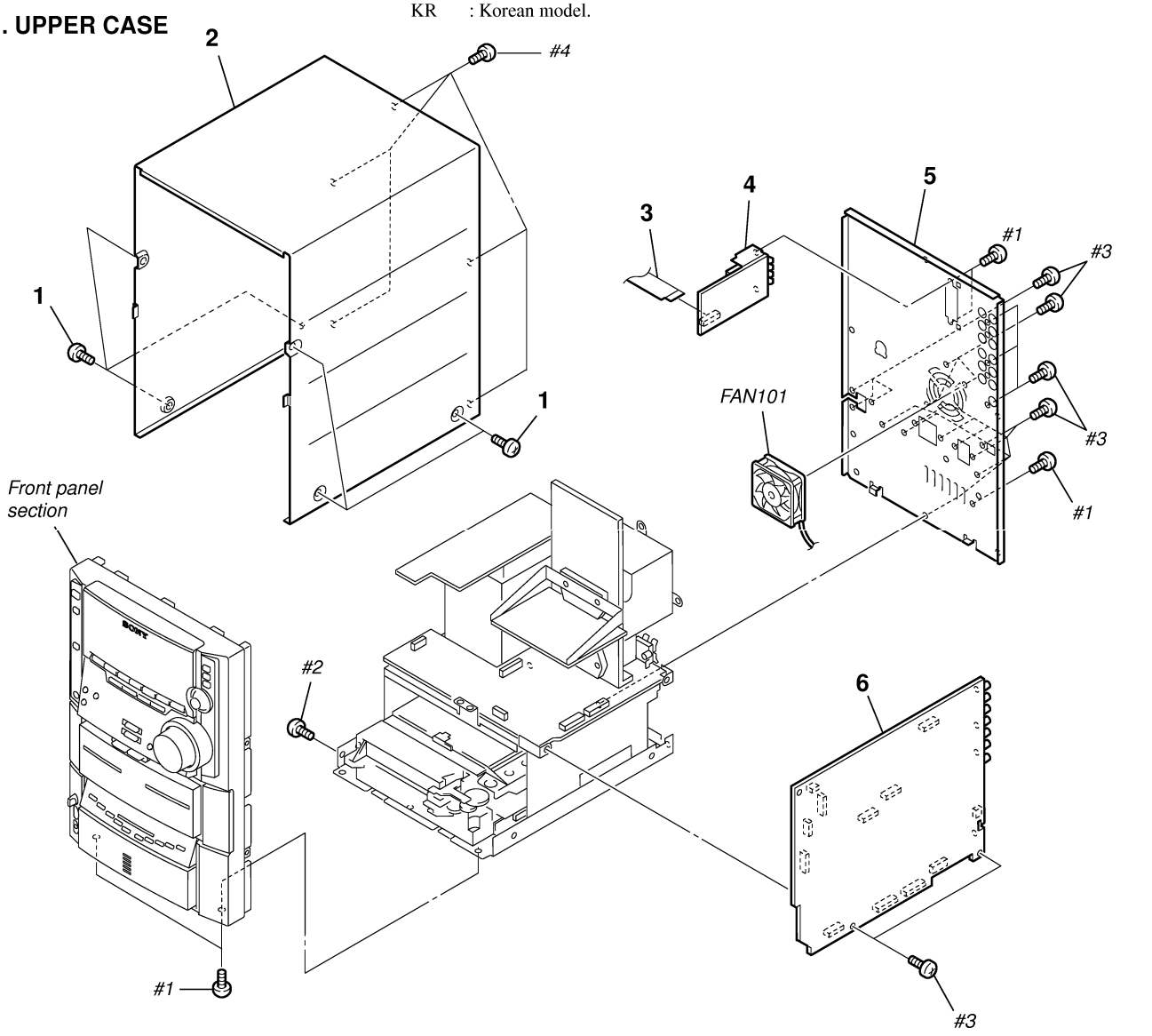
NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CND : Canadian model.
  G : German model.
  EA : Saudi Arabia model.
  AUS : Australian model.
  SP : Singapore model.
  MY : Malaysia model.
  AR : Argentine model.
  TH : Thai model.
  AED : North European model.
  MX : Mexican model.
  KR : Korean model.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

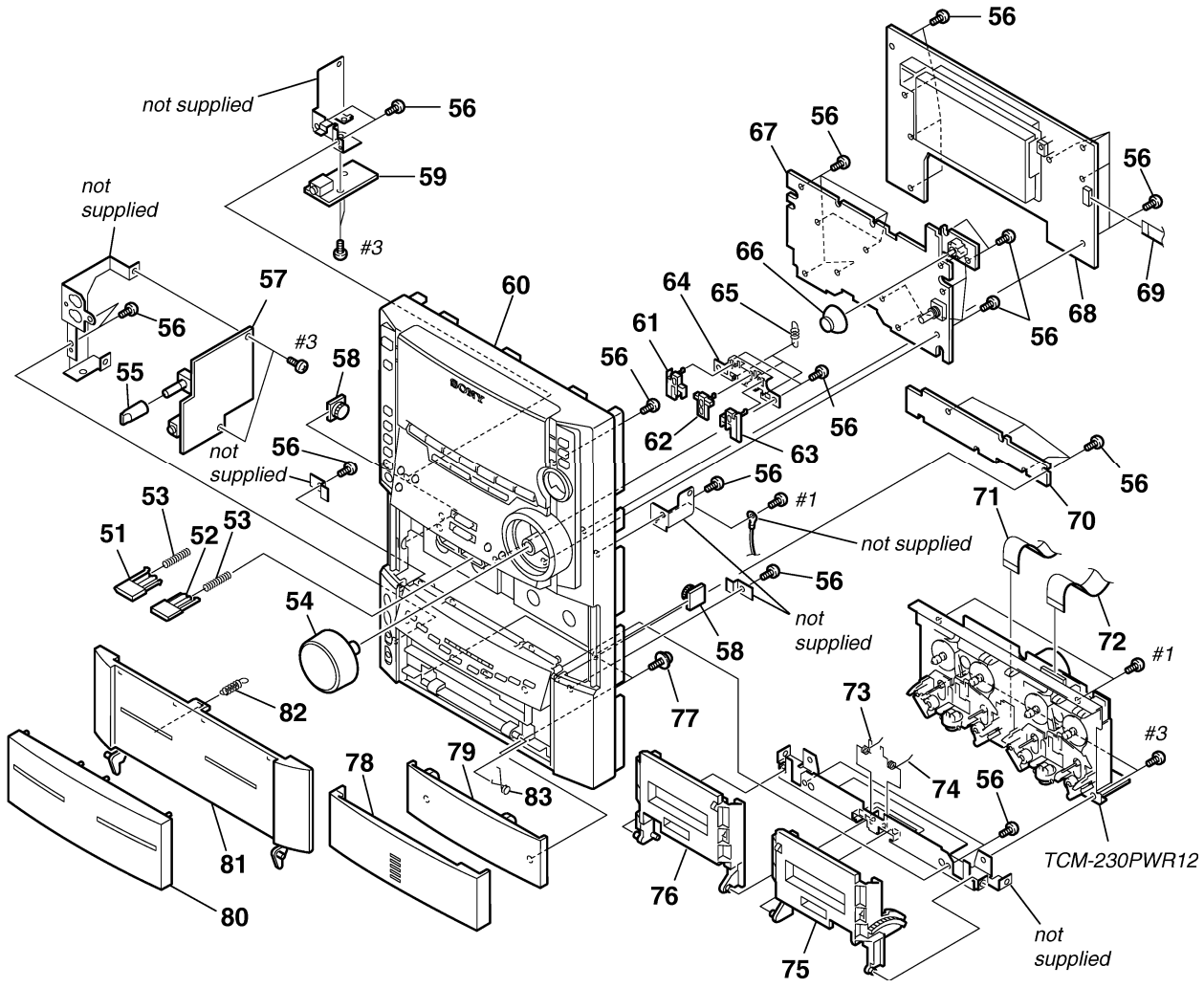
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. UPPER CASE



Ref. No.	Part No.	Description	Remarks
1	3-363-099-21	SCREW(CASE 3 TP2)	
2	4-226-746-01	UPPER CASE	
3	1-769-980-11	WIRE(FLAT TYPE) (13 CORE) (CND,E,EA,MY,SP,KR,TH,MX,AR,AUS)	
3	1-773-013-11	WIRE(FLAT TYPE) (15 CORE) (AEP,UK,G,AED,CIS)	
4	1-693-484-11	TUNER(FM/AM) (E,MX,AR)	
4	1-693-486-11	TUNER(FM/AM) (CND)	
4	1-693-488-11	TUNER(FM/AM) (EA,MY,SP,KR,AUS,TH)	
4	1-693-490-11	TUNER(FM/AM) (AEP,UK,G,AED,CIS)	
5	4-227-182-01	PANEL, BACK (CND)	
5	4-227-182-11	PANEL, BACK (AEP,UK,G,AED,CIS)	
5	4-227-182-21	PANEL, BACK (MY,SP)	
5	4-227-182-31	PANEL, BACK (E)	
5	4-227-182-41	PANEL, BACK (EA)	
5	4-227-182-51	PANEL, BACK (MX)	
5	4-227-182-61	PANEL, BACK (AUS)	
5	4-227-182-71	PANEL, BACK (AR)	
5	4-227-182-81	PANEL, BACK (KR,TH)	
6	A-4428-625-A	MAIN BOARD, COMPLETE (CND)	
6	A-4428-636-A	MAIN BOARD, COMPLETE (AEP,UK,G,AED,CIS)	
6	A-4428-646-A	MAIN BOARD, COMPLETE (MY,SP,KR)	
6	A-4428-946-A	MAIN BOARD, COMPLETE (EA)	
6	A-4428-951-A	MAIN BOARD, COMPLETE (E,MX,AR)	
6	A-4473-255-A	MAIN BOARD, COMPLETE (TH)	
6	A-4473-948-A	MAIN BOARD, COMPLETE (AUS)	
FAN101	1-763-072-11	FAN, D.C.	

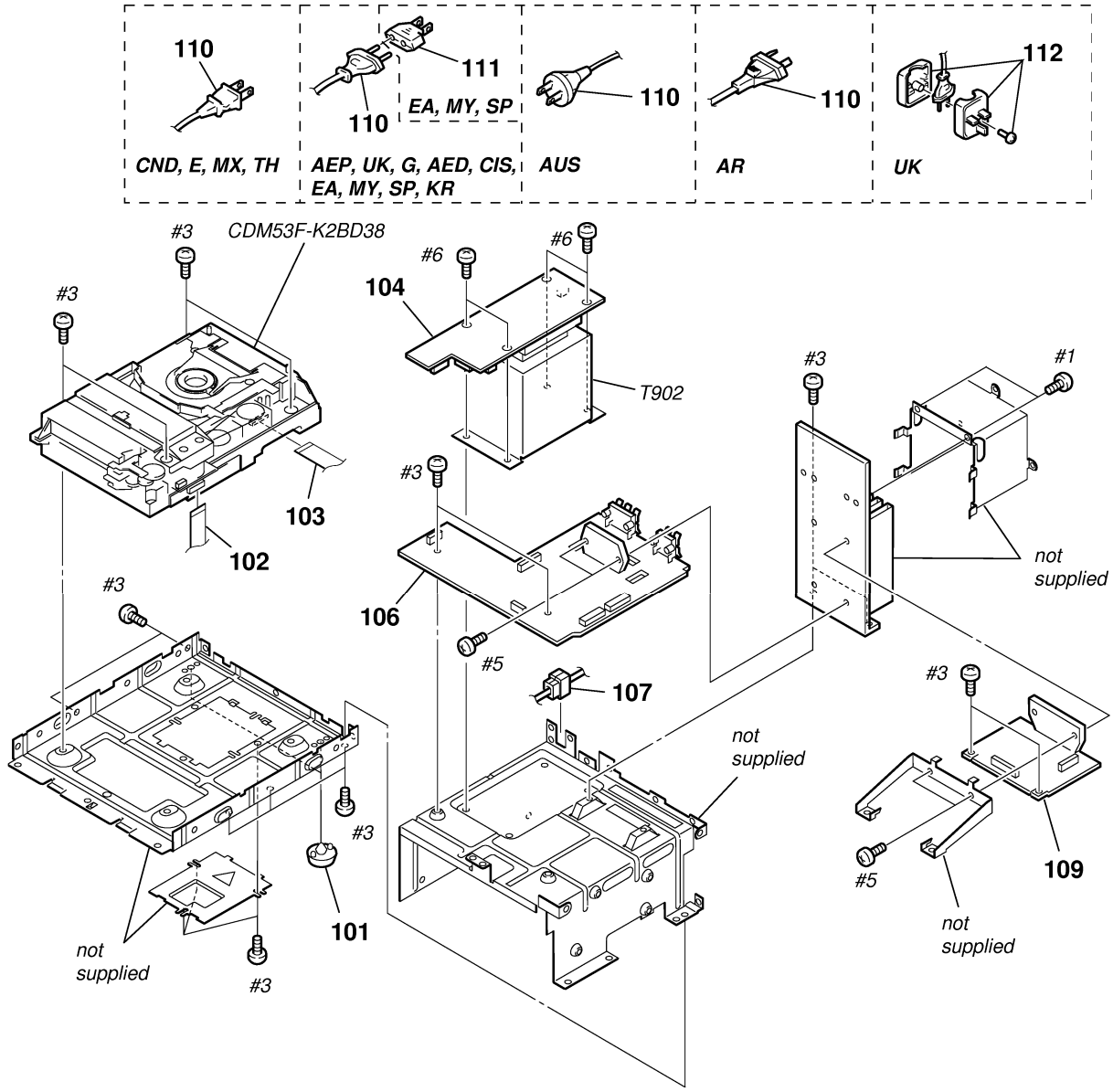
7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remarks
51	4-226-734-01	BUTTON (A), EJECT	
52	4-226-735-01	BUTTON (B), EJECT	
53	4-226-537-01	SPRING (TC EJECT), COIL	
54	4-226-715-01	KNOB, VOLUEME	
55	4-214-385-91	KNOB(MIC)(EA,MY,SP,KR,TH)	
56	4-951-620-01	SCREW (2.6X8), +BVTP	
57	1-676-972-11	MIC BOARD (EA,MY,SP,KR,TH)	
58	4-224-104-11	DAMPER	
59	1-676-971-11	HP BOARD	
60	X-4952-707-1	PANEL ASSY, FRONT (CND,E,KR,MX,AR,AUS)	
60	X-4952-708-1	PANEL ASSY, FRONT (AEP,UK,G,AED,CIS)	
60	X-4952-709-1	PANEL ASSY, FRONT (EA,MY,SP,TH)	
61	4-226-733-01	LOCK(B)	
62	4-226-731-01	LOCK(LID)	
63	4-226-732-01	LOCK(A)	
64	4-226-755-01	COVER, LOCK	
65	4-227-544-01	SPRING, TENSION	
66	4-226-713-01	CURSOR	
67	A-4473-239-A	SUB PANEL BOARD, COMPLETE (TH)	
67	A-4428-628-A	SUB PANEL BOARD, COMPLETE (EXCEPT TH)	

Ref. No.	Part No.	Description	Remarks
68	A-4428-626-A	PANEL BOARD, COMPLETE (CND,AEP,UK,G,AED,CIS,E,MX,AR,AUS)	
68	A-4428-953-A	PANEL BOARD, COMPLETE (EA,MY,SP,KR)	
68	A-4473-245-A	PANEL BOARD, COMPLETE (TH)	
69	1-769-938-11	WIRE(FLAT TYPE) (11 CORE)	
70	A-4428-661-A	CD SW BOARD, COMPLETE	
71	1-773-022-11	WIRE(FLAT TYPE) (15 CORE)(300mm)	
72	1-773-045-11	WIRE(FLAT TYPE) (17 CORE)(170mm)	
73	4-227-458-01	SPRING (TC A)	
74	4-227-459-01	SPRING (TC B)	
75	X-4952-712-1	HOLDER (B) ASSY, TC	
76	X-4952-711-1	HOLDER (A) ASSY, TC	
77	4-957-577-01	SCREW PTP WH (2.6X8) (DIA. 10)	
78	4-226-741-01	PANEL (CD), ALUMINUM	
79	4-226-737-01	LID (CD)	
80	4-226-728-01	PANEL (TC), ALUMINUM	
81	4-226-729-01	LID, TC	
82	4-227-460-01	SPRING, TENSION	
83	4-226-897-01	SPRING (CD)	

7-3. CHASSIS SECTION

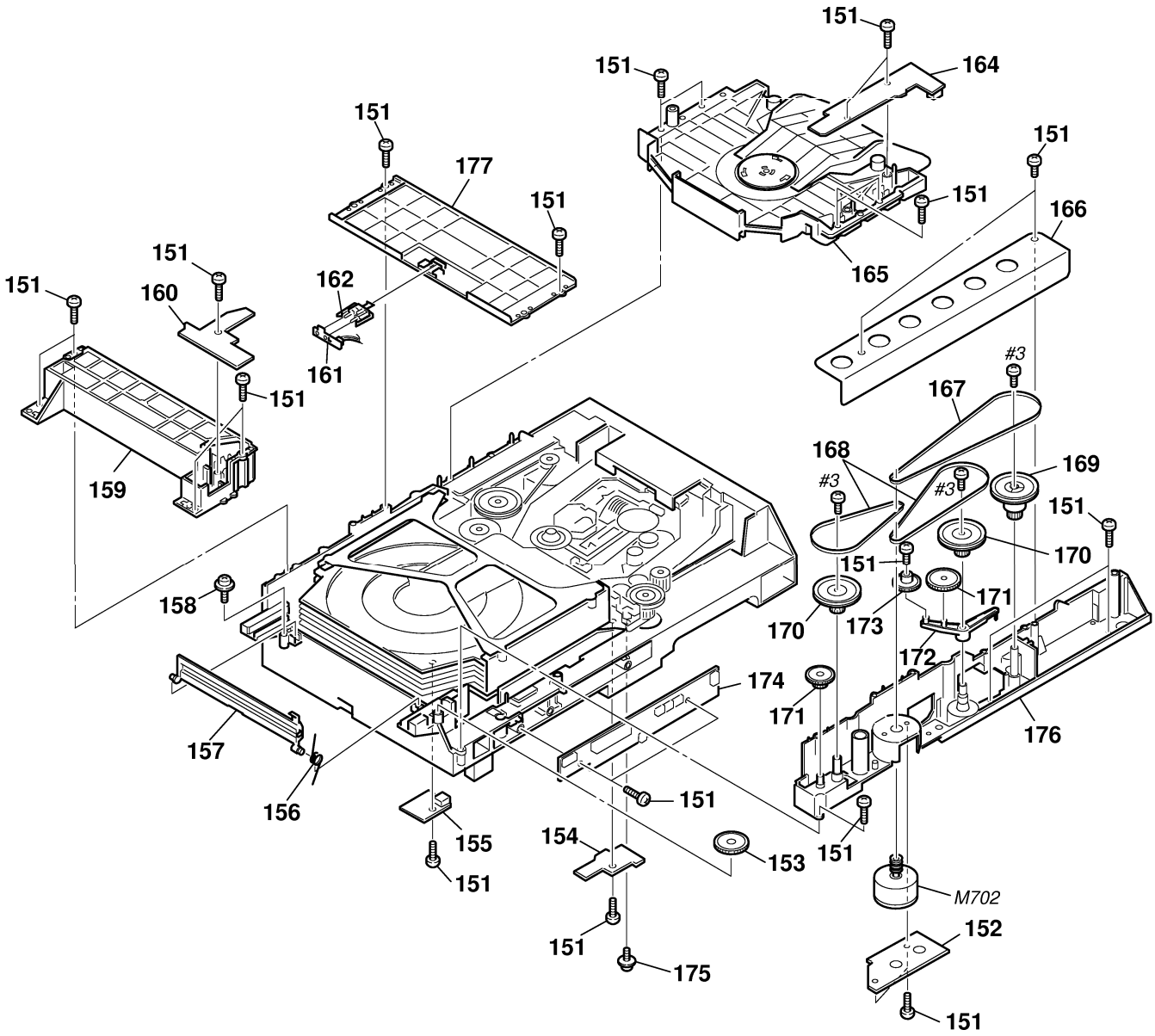


Ref. No.	Part No.	Description	Remarks
101	4-965-822-01	FOOT	
102	1-773-041-11	WIRE (FLAT TYPE) (17 CORE)	
103	1-792-794-11	WIRE (FLAT TYPE) (19 CORE)	
104	1-676-975-11	TRANS BOARD	
106	A-4428-620-A	FRONT AMP BOARD, COMPLETE (CND)	
106	A-4428-630-A	FRONT AMP BOARD, COMPLETE	(AEP,UK,G,AED,CIS)
106	A-4428-641-A	FRONT AMP BOARD, COMPLETE	(EA,MY,SP,KR,AUS)
106	A-4428-949-A	FRONT AMP BOARD, COMPLETE (E,MX,AR)	
106	A-4473-248-A	FRONT AMP BOARD, COMPLETE (TH)	
107	3-703-571-11	BUSHING (S) (4516), CORD (E,MX)	
* 107	3-703-244-00	BUSHING (2104), CORD	(CND,AEP,UK,G,AED,CIS,EA,MY,SP,KR,TH,AR,AUS)
109	A-4428-622-A	SURR AMP BOARD, COMPLETE (CND)	

Ref. No.	Part No.	Description	Remarks
109	A-4428-632-A	SURR AMP BOARD, COMPLETE	(AEP,UK,G,AED,CIS)
109	A-4428-643-A	SURR AMP BOARD, COMPLETE	(E,EA,MY,SP,KR,MX,AR,AUS)
109	A-4473-251-A	SURR AMP BOARD, COMPLETE (TH)	
⚠110	1-690-608-11	CORD, POWER (AUS)	
⚠110	1-690-609-21	CORD, POWER (CND,E,MX,TH)	
⚠110	1-769-079-21	CORD, POWER (KR)	
⚠110	1-777-071-51	CORD, POWER (AEP,UK,G,AED,CIS,EA,MY,SP)	
⚠110	1-783-941-21	CORD, POWER (AR)	
111	1-569-008-21	ADAPTOR, CONVERSION 2P (EA,MY,SP)	
112	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	
⚠T902	1-435-390-11	TRANSFORMER, POWER (CND)	
⚠T902	1-435-391-11	TRANSFORMER, POWER (AEP,UK,G,AED,CIS)	
⚠T902	1-435-392-11	TRANSFORMER, POWER	(E,EA,MY,SP,KR,TH,MX,AR,AUS)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

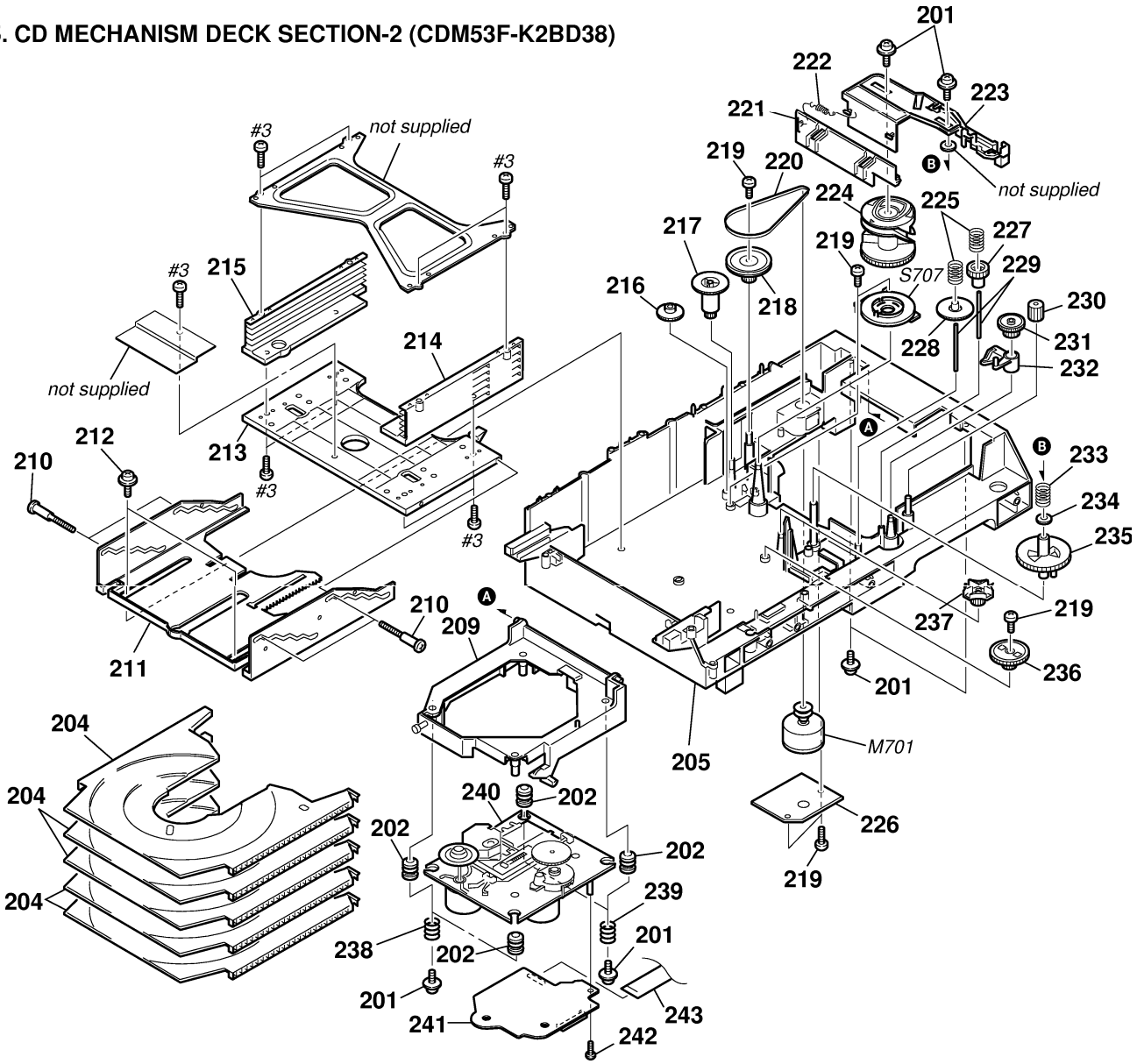
7-4. CD MECHANISM DECK SECTION-1 (CDM53F-K2BD38)



Ref. No.	Part No.	Description	Remarks
151	4-218-253-11	SCREW (M2.6), +BTTP	
152	1-671-508-11	LOAD MOTOR BOARD	
153	4-220-261-01	GEAR (EJECT)	
154	1-671-502-11	INT/COUNT SW BOARD	
155	1-671-504-11	SENSOR BOARD	
156	4-212-676-01	SPRING (LID), TORSION	
157	4-212-674-01	LID(DISC)	
158	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
159	A-4672-873-A	BASE (GUIDE) ASSY, FITTING	
160	1-671-503-11	OUT SW BOARD	
161	1-671-789-11	SENSOR 2 BOARD	
162	4-220-274-01	HOLDER (SENSOR)	
164	1-671-505-11	IN SW BOARD	
165	A-4672-872-D	BASE (MAGNET) ASSY, FITTING	

Ref. No.	Part No.	Description	Remarks
166	4-214-129-01	COVER	
167	4-211-235-01	BELT (COMMUNICATION)	
168	4-211-236-01	BELT (LOADING)	
169	4-211-231-01	PULLEY (MODE)	
170	4-211-214-01	PULLEY (LD)	
171	4-211-232-01	GEAR (LD DECELERATION)	
172	4-211-228-01	LEVER (GOOSENECK)	
173	4-214-130-01	GEAR (TRAY)	
174	1-671-506-11	CONNECTOR BOARD	
175	3-341-549-01	SCREW(2.6X12)(DIA.7.5),+PTP WH	
176	4-213-488-04	CHASSIS (MODE B)	
177	4-213-579-01	BRACKET (CHASSIS)	
M702	X-4950-342-1	MOTOR (LOADING) ASSY	

7-5. CD MECHANISM DECK SECTION-2 (CDM53F-K2BD38)

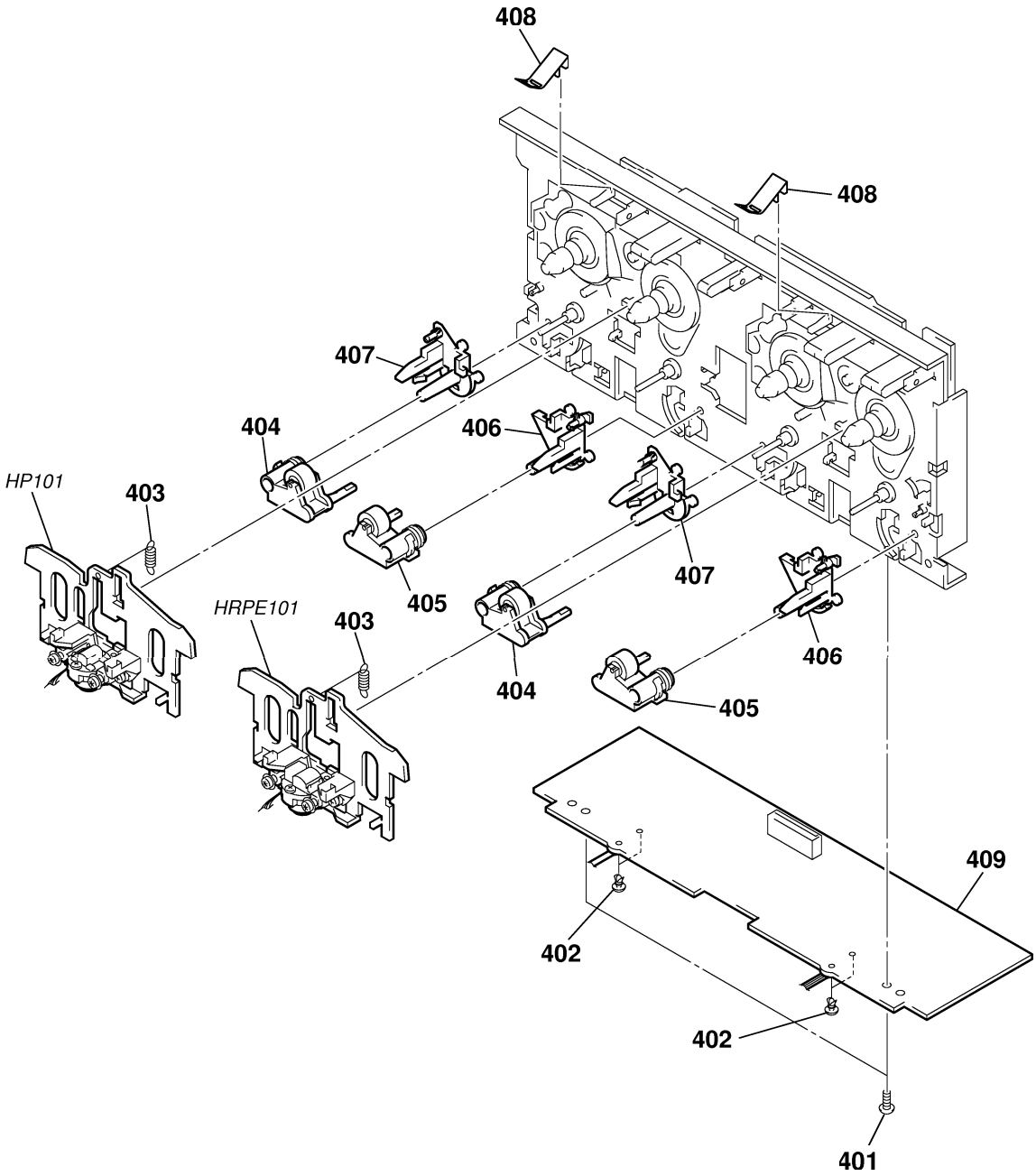


Ref. No.	Part No.	Description	Remarks
201	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
202	4-220-933-01	INSULATOR	
204	4-211-212-51	TRAY (SUB)	
205	4-213-482-02	CHASSIS (MODE A)	
209	X-4950-322-3	HOLDER (BU) ASSY	
210	4-211-244-01	SCREW, STEP	
211	4-211-223-01	SLIDER (U/D)	
212	4-933-134-01	SCREW (M2.6), +PTPWH	
213	4-221-504-01	BASE (STOCKER), FITTING	
214	4-211-211-01	STOCKER (R)	
215	4-211-210-01	STOCKER (L)	
216	4-211-215-01	GEAR (EJECT)	
217	4-211-232-01	GEAR (MODE DECELERATION)	
218	4-211-214-01	PULLEY (LD)	
219	4-218-253-11	SCREW (M2.6), +BTTP	
220	4-211-237-01	BELT (MODE)	
221	4-212-677-01	SLIDER (SHUTTER)	
222	4-212-678-01	SPRING (SHUTTER), TENSION	
223	4-211-233-01	SLIDER (SELECTION)	
224	4-211-230-01	GEAR (CHUCKING)	
225	4-211-245-01	SPRING, COMPRESSION	

Ref. No.	Part No.	Description	Remarks
226	1-671-507-11	CLAMP MOTOR BOARD	
227	4-211-221-01	GEAR (LD MOVABLE)	
228	4-211-217-01	GEAR (SELECTION)	
229	4-211-242-11	SHAFT (SELECTION GEAR)	
230	4-211-240-01	GEAR (LD DECELERATION B)	
231	4-211-216-01	GEAR (RELAY)	
232	4-211-241-01	LEVER (SELECTION)	
233	4-216-879-01	SPRING (GEAR), COIL	
234	3-701-446-21	WASHER	
235	4-211-218-01	GEAR (GEAR A)	
236	4-211-220-01	GEAR (U/D SLIDER)	
237	4-211-219-01	GEAR (GEAR B)	
238	4-222-784-01	SPRING (INSULATOR),COMPRESSION	
239	4-222-785-01	SPRING (INSULATOR),COMPRESSION	
⚠240	8-820-116-01	OPICAL PICK-UP BLOCK KSM-213DAP	
241	A-4724-934-A	BD BOARD, COMPLETE	
242	4-951-620-01	SCREW (2.6X8), +BVTP	
243	1-792-024-11	WIRE (FLAT TYPE) (16 CORE)	
M701	X-4950-341-1	MOTOR (CLAMP) ASSY (ELEVATOR UP/DOWN)	
S707	1-418-045-01	ENCODER, ROTARY (DISC TRAY ADDRES DETECT)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

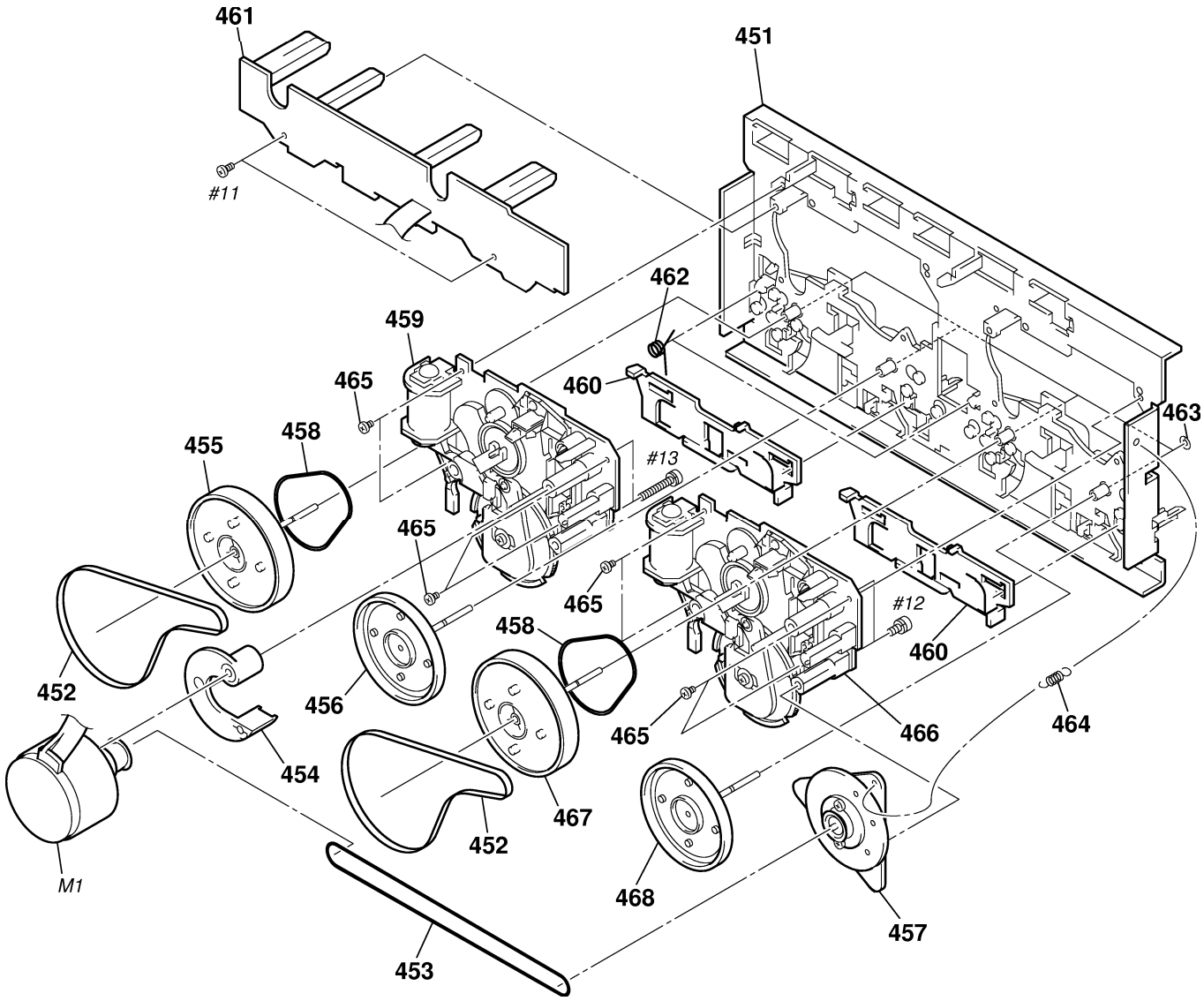
7-6. TAPE MECHANISM DECK SECTION-1 (TCM-230AWR12)



Ref. No.	Part No.	Description	Remarks
401	3-376-464-11	SCREW(+PTT 2.6X6),GROUND POINT	
402	3-911-116-42	RIVET, PUSH	
403	3-016-574-01	SPRING (HEAD), TENSION	
404	X-3374-156-4	PINCH LEVER (REV) ASSY	
405	X-3374-155-4	PINCH LEVER (FWD) ASSY	
406	3-017-365-01	BASE (PINCH LEVER FWD)	

Ref. No.	Part No.	Description	Remarks
407	3-017-366-01	BASE (PINCH LEVER REV)	
408	3-016-567-02	SPRING (CASSETTE), LEAF	
409	A-2007-845-A	AUDIO BOARD, COMPLETE	
HP101	A-2004-778-A	BASE (A) ASSY, HEAD	
HRPE101	A-2004-779-A	BASE (B) ASSY, HEAD	

7-7. TAPE MECHANISM DECK SECTION-2 (TCM-230AWR12)



Ref. No.	Part No.	Description	Remarks
451	X-4952-881-1	CHASSIS ASSY, MAIN	
452	3-041-946-01	BELT (CAPSTAN B)	
453	4-227-239-01	BELT (CAPSTAN C)	
454	3-016-568-01	BRACKET (MOTOR)	
455	X-3378-040-1	FLYWHEEL (A-FWD) ASSY	
456	X-3378-041-1	FLYWHEEL (A-REV) ASSY	
457	X-3374-157-1	PULLEY ASSY, TENSION	
458	3-041-947-01	BELT (FR)	
459	A-2004-752-A	BLOCK (A) ASSY, MECHANICAL	
460	3-016-566-01	SLIDER, REVERSE	

Ref. No.	Part No.	Description	Remarks
461	A-2007-838-A	LEAF SW BOARD, COMPLETE	
462	4-228-450-01	SPRING (REVERSE SLIDER),TORSION	
463	3-019-208-01	WASHER, STOPPER	
464	3-027-453-01	SPRING (GROUND), TENSION	
465	3-030-823-01	SCREW (+BVTT) (2X3.5)	
466	A-2004-753-A	BLOCK (B) ASSY, MECHANICAL	
467	X-3378-042-1	FLYWHEEL (B-FWD) ASSY	
468	X-3378-043-1	FLYWHEEL (B-REV) ASSY	
M1	X-3378-241-1	MOTOR ASSY	

SECTION 8
ELECTRICAL PARTS LIST

AUDIO

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- Abbreviation
  CND : Canadian model.
  G : German model.
  EA : Saudi Arabia model.
  AUS : Australian model.
  SP : Singapore model.
  MY : Malaysia model.
  AR : Argentine model.
  TH : Thai model.
  AED : North European model.
  MX : Mexican model.
  KR : Korean model.
- CAPACITORS:
  uF: µF
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remarks
	A-2007-845-A	AUDIO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C301	1-162-289-31	CERAMIC	390PF	10.00%	50V
C302	1-126-968-11	ELECT	100uF	20.00%	6.3V
C303	1-162-282-31	CERAMIC	100PF	10%	50V
C304	1-130-483-00	MYLAR	0.01uF	5%	50V
C305	1-107-715-11	ELECT	22uF	20.00%	16V
C311	1-162-289-31	CERAMIC	390PF	10.00%	50V
C313	1-162-282-31	CERAMIC	100PF	10%	50V
C314	1-130-487-00	MYLAR	0.022uF	5%	50V
C315	1-126-233-11	ELECT	22uF	20%	50V
C331	1-136-434-11	FILM	120PF	5.00%	630V
C332	1-162-288-31	CERAMIC	330PF	10%	50V
C333	1-162-209-31	CERAMIC	27PF	5.00%	50V
C401	1-162-289-31	CERAMIC	390PF	10.00%	50V
C402	1-126-968-11	ELECT	100uF	20.00%	6.3V
C403	1-162-282-31	CERAMIC	100PF	10%	50V
C404	1-130-483-00	MYLAR	0.01uF	5%	50V
C405	1-107-715-11	ELECT	22uF	20.00%	16V
C411	1-162-289-31	CERAMIC	390PF	10.00%	50V
C413	1-162-282-31	CERAMIC	100PF	10%	50V
C414	1-130-487-00	MYLAR	0.022uF	5%	50V
C415	1-126-233-11	ELECT	22uF	20%	50V
C431	1-136-434-11	FILM	120PF	5.00%	630V
C432	1-162-288-31	CERAMIC	330PF	10%	50V
C433	1-162-209-31	CERAMIC	27PF	5.00%	50V
C601	1-104-396-11	ELECT	10uF	20.00%	16V
C602	1-104-396-11	ELECT	10uF	20.00%	16V
C611	1-104-396-11	ELECT	10uF	20.00%	16V
C612	1-104-396-11	ELECT	10uF	20.00%	16V
C621	1-137-150-11	FILM	0.01uF	5.00%	100V
C622	1-126-961-11	ELECT	2.2uF	20.00%	50V
C623	1-136-155-00	FILM	0.015uF	5%	50V
C624	1-130-481-00	MYLAR	0.0068uF	5%	50V
C625	1-130-481-00	MYLAR	0.0068uF	5%	50V
C627	1-124-903-11	ELECT	1uF	20.00%	50V
C628	1-136-153-00	FILM	0.01uF	5%	50V
C642	1-104-664-11	ELECT	47uF	20.00%	16V
		< CONNECTOR >			
CN601	1-568-834-21	SOCKET, CONNECTOR 15P			

Ref. No.	Part No.	Description				Remarks
		< IC >				
IC601	8-759-111-44	IC uPC4570C-1				
IC602	8-759-143-54	IC uPC1330HA				
IC611	8-759-111-44	IC uPC4570C-1				
		< COIL >				
L331	1-410-780-11	INDUCTOR	27MH			
L431	1-410-780-11	INDUCTOR	27MH			
		< TRANSISTOR >				
Q621	8-729-142-46	TRANSISTOR	2SC2001TP-LK			
Q622	8-729-142-46	TRANSISTOR	2SC2001TP-LK			
Q623	8-729-801-93	TRANSISTOR	2SD1387-34-TP			
		< RESISTOR >				
R301	1-247-881-00	CARBON	120K	5%	1/4W	
R302	1-249-409-11	CARBON	220	5%	1/4W	F
R303	1-249-433-11	CARBON	22K	5%	1/4W	
R304	1-247-889-00	CARBON	270K	5%	1/4W	
R305	1-247-858-11	CARBON	13K	5%	1/4W	
R311	1-247-881-00	CARBON	120K	5%	1/4W	
R312	1-247-807-31	CARBON	100	5%	1/4W	
R314	1-247-882-11	CARBON	130K	5%	1/4W	
R315	1-247-850-11	CARBON	6.2K	5%	1/4W	
R331	1-249-430-11	CARBON	12K	5%	1/4W	
R401	1-247-881-00	CARBON	120K	5%	1/4W	
R402	1-249-409-11	CARBON	220	5%	1/4W	F
R403	1-249-433-11	CARBON	22K	5%	1/4W	
R404	1-247-889-00	CARBON	270K	5%	1/4W	
R405	1-247-858-11	CARBON	13K	5%	1/4W	
R411	1-247-881-00	CARBON	120K	5%	1/4W	
R412	1-247-807-31	CARBON	100	5%	1/4W	
R414	1-247-882-11	CARBON	130K	5%	1/4W	
R415	1-247-850-11	CARBON	6.2K	5%	1/4W	
R431	1-249-430-11	CARBON	12K	5%	1/4W	
R601	1-249-409-11	CARBON	220	5%	1/4W	F
R602	1-249-409-11	CARBON	220	5%	1/4W	F
R608	1-249-409-11	CARBON	220	5%	1/4W	F
R609	1-249-433-11	CARBON	22K	5%	1/4W	
R611	1-249-409-11	CARBON	220	5%	1/4W	F

AUDIO BD

Ref. No.	Part No.	Description			Remarks
R612	1-249-409-11	CARBON	220	5%	1/4W F
⚠R621	1-212-851-00	FUSIBLE	5.6	5%	1/4W
⚠R622	1-212-851-00	FUSIBLE	5.6	5%	1/4W
R623	1-249-432-11	CARBON	18K	5%	1/4W
R624	1-249-432-11	CARBON	18K	5%	1/4W
R625	1-249-429-11	CARBON	10K	5%	1/4W
		< VARIABLE RESISTOR >			
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV311	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV341	1-241-768-11	RES, ADJ, CARBON 220K			
RV401	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV411	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV441	1-241-768-11	RES, ADJ, CARBON 220K			
		< TRANSFORMER >			
T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			
**********					
	A-4724-934-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C102	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C103	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C104	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C108	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C109	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C110	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C111	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C112	1-107-682-11	CERAMIC CHIP	1uF	10.00%	16V
C114	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C115	1-104-665-11	ELECT	100uF	20.00%	10V
C116	1-104-665-11	ELECT	100uF	20.00%	10V
C117	1-104-665-11	ELECT	100uF	20.00%	10V
C118	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C119	1-163-235-11	CERAMIC CHIP	22PF	5.00%	50V
C121	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C122	1-104-665-11	ELECT	100uF	20.00%	10V
C123	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V
C124	1-107-823-11	CERAMIC CHIP	0.47uF	10.00%	16V
C125	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C126	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C127	1-104-665-11	ELECT	100uF	20.00%	10V
C129	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C130	1-164-346-11	CERAMIC CHIP	1uF		16V
C131	1-126-964-11	ELECT	10uF	20.00%	50V
C133	1-164-346-11	CERAMIC CHIP	1uF		16V
C140	1-164-346-11	CERAMIC CHIP	1uF		16V
C141	1-164-346-11	CERAMIC CHIP	1uF		16V
C143	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C145	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C153	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C159	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C162	1-104-665-11	ELECT	100uF	20.00%	10V
C163	1-104-665-11	ELECT	100uF	20.00%	10V
C165	1-163-038-91	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description			Remarks
C167	1-163-237-11	CERAMIC CHIP	27PF	5.00%	50V
C168	1-163-235-11	CERAMIC CHIP	22PF	5.00%	50V
C171	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C172	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C181	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C182	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
		< CONNECTOR >			
CN101	1-784-741-11	CONNECTOR, FFC 19P			
CN102	1-793-907-11	CONNECTOR, FFC/FPC 16P			
		< FERRITE BEAD >			
FB101	1-469-731-21	INDUCTOR	0UH		
FB103	1-469-731-21	INDUCTOR	0UH		
		< IC >			
IC101	8-752-386-85	IC CXD2587Q			
IC102	8-759-549-28	IC BA5974FP-E2			
IC103	8-752-085-51	IC CXA2568M-T6			
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR MSB710-R			
		< RESISTOR >			
R101	1-216-077-91	RES-CHIP	15K	5%	1/10W
R102	1-216-097-91	RES-CHIP	100K	5%	1/10W
R103	1-216-077-91	RES-CHIP	15K	5%	1/10W
R104	1-216-085-00	METAL CHIP	33K	5%	1/10W
R105	1-216-073-00	METAL CHIP	10K	5%	1/10W
R106	1-216-049-91	RES-CHIP	1K	5%	1/10W
R107	1-216-073-00	METAL CHIP	10K	5%	1/10W
R108	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R109	1-216-121-91	RES-CHIP	1M	5%	1/10W
R110	1-216-025-91	RES-CHIP	100	5%	1/10W
R111	1-216-121-91	RES-CHIP	1M	5%	1/10W
R113	1-216-121-91	RES-CHIP	1M	5%	1/10W
R114	1-216-073-00	METAL CHIP	10K	5%	1/10W
R116	1-216-001-00	METAL CHIP	10	5%	1/10W
R117	1-216-049-91	RES-CHIP	1K	5%	1/10W
R118	1-216-025-91	RES-CHIP	100	5%	1/10W
R119	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W
R124	1-216-097-91	RES-CHIP	100K	5%	1/10W
R131	1-216-033-00	METAL CHIP	220	5%	1/10W
R143	1-216-103-00	METAL CHIP	180K	5%	1/10W
R144	1-216-103-00	METAL CHIP	180K	5%	1/10W
R147	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R148	1-216-001-00	METAL CHIP	10	5%	1/10W
R149	1-216-001-00	METAL CHIP	10	5%	1/10W
R158	1-216-111-00	METAL CHIP	390K	5%	1/10W
R159	1-216-101-00	METAL CHIP	150K	5%	1/10W
R162	1-216-101-00	METAL CHIP	150K	5%	1/10W
R171	1-216-078-00	RES-CHIP	16K	5%	1/10W
R172	1-216-073-00	METAL CHIP	10K	5%	1/10W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remarks
R173	1-216-077-91	RES-CHIP	15K	5%	1/10W
R181	1-216-078-00	RES-CHIP	16K	5%	1/10W
R182	1-216-073-00	METAL CHIP	10K	5%	1/10W
R183	1-216-077-91	RES-CHIP	15K	5%	1/10W
		< NETWORK >			
RN101	1-233-576-11	RES, CHIP NETWORK 100			
		< SWITCH >			
S101	1-771-853-11	SWITCH, DETECTION			
		< VIBRATOR >			
X101	1-579-280-11	VIBRATOR, CRYSTAL 16.9344MHz			
**********					
	A-4428-661-A	CD SW BOARD, COMPLETE			
		**********			
		< DIODE >			
D661	8-719-058-64	DIODE SEL5823A-TP15 (CD 1)			
D662	8-719-058-64	DIODE SEL5823A-TP15 (CD 2)			
D663	8-719-058-64	DIODE SEL5823A-TP15 (CD 3)			
D664	8-719-058-64	DIODE SEL5823A-TP15 (CD 4)			
D665	8-719-058-64	DIODE SEL5823A-TP15 (CD 5)			
		< RESISTOR >			
R628	1-249-420-11	CARBON	1.8K	5%	1/4W F
R629	1-249-422-11	CARBON	2.7K	5%	1/4W F
R630	1-247-843-11	CARBON	3.3K	5%	1/4W
R631	1-249-425-11	CARBON	4.7K	5%	1/4W F
R632	1-249-427-11	CARBON	6.8K	5%	1/4W F
R633	1-249-429-11	CARBON	10K	5%	1/4W
R634	1-249-431-11	CARBON	15K	5%	1/4W
R635	1-249-434-11	CARBON	27K	5%	1/4W
R636	1-249-438-11	CARBON	56K	5%	1/4W
R661	1-249-409-11	CARBON	220	5%	1/4W F
R662	1-249-409-11	CARBON	220	5%	1/4W F
R663	1-249-409-11	CARBON	220	5%	1/4W F
R664	1-249-409-11	CARBON	220	5%	1/4W F
R665	1-249-409-11	CARBON	220	5%	1/4W F
		< SWITCH >			
S627	1-762-875-21	SWITCH, KEYBOARD (EJECT 5)			
S628	1-762-875-21	SWITCH, KEYBOARD (EJECT 4)			
S629	1-762-875-21	SWITCH, KEYBOARD (EJECT 3)			
S630	1-762-875-21	SWITCH, KEYBOARD (EJECT 2)			
S631	1-762-875-21	SWITCH, KEYBOARD (EJECT 1)			
S632	1-762-875-21	SWITCH, KEYBOARD (DISC 5)			
S633	1-762-875-21	SWITCH, KEYBOARD (DISC 4)			
S634	1-762-875-21	SWITCH, KEYBOARD (DISC 3)			
S635	1-762-875-21	SWITCH, KEYBOARD (DISC 2)			
S636	1-762-875-21	SWITCH, KEYBOARD (DISC 1)			
**********					
	1-671-506-11	CONNECTOR BOARD			
		**********			
		< CONNECTOR >			
CN701	1-568-860-11	SOCKET, CONNECTOR 17P			

Ref. No.	Part No.	Description			Remarks
		< TRANSISTOR >			
Q701	8-729-029-66	TRANSISTOR RT1N141S-TP			
		< RESISTOR >			
R707	1-249-424-11	CARBON	3.9K	5%	1/4W F
R708	1-249-417-11	CARBON	1K	5%	1/4W F
R709	1-249-429-11	CARBON	10K	5%	1/4W
**********					
	1-671-507-11	CLAMP MOTOR BOARD			
		**********			
		< CAPACITOR >			
C701	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C702	1-126-964-11	ELECT	10uF	20.00%	50V
C711	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
		< CONNECTOR >			
CN712	1-506-469-11	PIN, CONNECTOR 4P			
		< DIODE >			
D701	8-719-983-66	DIODE MTZJ-T-72-3.6B			
		< IC >			
IC701	8-759-633-65	IC M54641L			
		< RESISTOR >			
R701	1-249-411-11	CARBON	330	5%	1/4W
R702	1-249-401-11	CARBON	47	5%	1/4W F
**********					
	A-4428-620-A	FRONT AMP BOARD, COMPLETE (CND)			
		**********			
	A-4428-630-A	FRONT AMP BOARD, COMPLETE			
		(AEP,UK,G,AED,CIS)			
		**********			
	A-4428-641-A	FRONT AMP BOARD, COMPLETE			
		(EA,MY,SP,KR,AUS)			
		**********			
	A-4428-949-A	FRONT AMP BOARD, COMPLETE (E,MX,AR)			
		**********			
	A-4473-248-A	FRONT AMP BOARD, COMPLETE (TH)			
		**********			
		< CAPACITOR >			
C801	1-126-963-11	ELECT	4.7uF	20.00%	50V
					(EXCEPT CND)
C801	1-128-581-11	ELECT	4.7uF	20.00%	100V
					(CND)
C802	1-162-286-31	CERAMIC	220PF	10%	50V
C803	1-162-282-31	CERAMIC	100PF	10%	50V
C804	1-104-664-11	ELECT	47uF	20.00%	10V
C806	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C807	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C808	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C809	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C811	1-162-306-11	CERAMIC	0.01uF	30.00%	16V

FRONT AMP

Ref. No.	Part No.	Description			Remarks
C812	1-162-306-11	CERAMIC	0.01uF	30.00% 16V	
C821	1-107-721-11	ELECT	4.7uF	20.00% 100V	
C822	1-107-717-11	ELECT	47uF	20.00% 50V	
C831	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C832	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C833	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C834	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C835	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C836	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C837	1-126-963-11	ELECT	4.7uF	20.00% 50V	
C851	1-126-963-11	ELECT	4.7uF	20.00% 50V	(EXCEPT CND)
C851	1-128-581-11	ELECT	4.7uF	20.00% 100V	(CND)
C852	1-162-286-31	CERAMIC	220PF	10% 50V	
C853	1-162-282-31	CERAMIC	100PF	10% 50V	
C854	1-104-664-11	ELECT	47uF	20.00% 10V	
C856	1-136-495-11	MYLAR	0.068uF	5.00% 50V	
C857	1-136-495-11	MYLAR	0.068uF	5.00% 50V	
C858	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C859	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C861	1-162-306-11	CERAMIC	0.01uF	30.00% 16V	
C862	1-162-306-11	CERAMIC	0.01uF	30.00% 16V	
C863	1-162-306-11	CERAMIC	0.01uF	30.00% 16V	
C864	1-162-306-11	CERAMIC	0.01uF	30.00% 16V	
C865	1-162-306-11	CERAMIC	0.01uF	30.00% 16V	
C871	1-107-721-11	ELECT	4.7uF	20.00% 100V	
C872	1-126-959-11	ELECT	0.47uF	20.00% 50V	
C891	1-104-665-11	ELECT	100uF	20.00% 10V	
C892	1-126-961-11	ELECT	2.2uF	20.00% 50V	
C893	1-104-665-11	ELECT	100uF	20.00% 10V	
C911	1-130-777-00	MYLAR	0.1uF	10.00% 100V	
C912	1-130-777-00	MYLAR	0.1uF	10.00% 100V	
C951	1-127-813-11	ELECT	3300uF	20% 71V	(E,MX,AR,EA,MY,SP,KR,AUS,TH)
C951	1-127-752-11	ELECT	3300uF	20% 63V	(CND,AEP,UK,G,AED,CIS)
C952	1-127-813-11	ELECT	3300uF	20% 71V	(E,MX,AR,EA,MY,SP,KR,AUS,TH)
C952	1-127-752-11	ELECT	3300uF	20% 63V	(CND,AEP,UK,G,AED,CIS)
C953	1-127-935-11	ELECT	3300uF	20% 42V	
C954	1-127-935-11	ELECT	3300uF	20% 42V	
C955	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C956	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C961	1-128-560-11	ELECT	22uF	20.00% 100V	
C962	1-128-560-11	ELECT	22uF	20.00% 100V	
C963	1-126-968-11	ELECT	100uF	20.00% 50V	
C964	1-126-967-11	ELECT	47uF	20.00% 50V	
C981	1-128-564-11	ELECT	220uF	20.00% 100V	
C982	1-126-964-11	ELECT	10uF	20.00% 50V	
C983	1-126-968-11	ELECT	100uF	20.00% 50V	
C984	1-164-159-11	CERAMIC	0.1uF	50V	
C991	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C992	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C993	1-136-165-00	MYLAR	0.1uF	5.00% 50V	
C994	1-136-165-00	MYLAR	0.1uF	5.00% 50V	

Ref. No.	Part No.	Description	Remarks
		< CONNECTOR >	
CN801	1-691-768-11	PLUG (MICRO CONNECTOR) 6P	
CN803	1-778-982-21	CONNECTOR, BOARD TO BOARD 13P	
CN804	1-778-982-21	CONNECTOR, BOARD TO BOARD 13P	
		< DIODE >	
D801	8-719-911-19	DIODE 1SS133T-72	
D802	8-719-911-19	DIODE 1SS133T-72	
D821	8-719-911-19	DIODE 1SS133T-72	
D831	8-719-911-19	DIODE 1SS133T-72	
D851	8-719-911-19	DIODE 1SS133T-72	
D871	8-719-911-19	DIODE 1SS133T-72	
D881	8-719-911-19	DIODE 1SS133T-72	
D911	8-719-302-38	DIODE RBV-602-01	
D951	8-719-302-38	DIODE RBV-602-01	
D961	8-719-947-58	DIODE MTZJ-T-72-13C	
D962	8-719-947-58	DIODE MTZJ-T-72-13C	
D963	8-719-911-19	DIODE 1SS133T-72	
D981	8-719-024-99	DIODE 11ES2-NTA2B	
D982	8-719-079-21	DIODE MTZJ-T-72-20D	
D983	8-719-079-21	DIODE MTZJ-T-72-20D	
D984	8-719-160-56	DIODE RD12F-T7B2	
D991	8-719-024-99	DIODE 11ES2-NTA2B	
D992	8-719-024-99	DIODE 11ES2-NTA2B	
D993	8-719-024-99	DIODE 11ES2-NTA2B	
D994	8-719-024-99	DIODE 11ES2-NTA2B	
D995	8-719-024-99	DIODE 11ES2-NTA2B	
D996	8-719-024-99	DIODE 11ES2-NTA2B	
D997	8-719-024-99	DIODE 11ES2-NTA2B	
D998	8-719-024-99	DIODE 11ES2-NTA2B	
		< EARTH >	
* EPT100	1-537-738-21	TERMINAL, EARTH	
* EPT951	1-537-738-21	TERMINAL, EARTH	
		< IC >	
IC801	8-749-017-03	IC STK412-020	(E,EA,MY,SP,KR,MX,AR,AUS,TH)
IC801	8-749-017-01	IC STK412-000 (CND,AEP,UK,G,AED,CIS)	
		< COIL >	
L811	1-420-872-00	COIL, AIR-CORE	
L831	1-420-872-00	COIL, AIR-CORE	
L832	1-420-872-00	COIL, AIR-CORE	
L833	1-420-872-00	COIL, AIR-CORE	
L861	1-420-872-00	COIL, AIR-CORE	
		< TRANSISTOR >	
Q801	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q821	8-729-231-55	TRANSISTOR 2SC2878AB-TPE2	
Q822	8-729-900-63	TRANSISTOR BN1F4M-TP	
Q851	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q871	8-729-231-55	TRANSISTOR 2SC2878AB-TPE2	
Q881	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA	
Q883	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q891	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q892	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q893	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA	

Ref. No.	Part No.	Description				Remarks
Q894	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
Q895	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
Q896	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
Q897	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
Q901	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
			(CND,AEP,UK,G,AED,CIS)			
Q961	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
Q962	8-729-140-82	TRANSISTOR	2SA1376-T-L			
Q963	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
Q981	8-729-048-52	TRANSISTOR	2SA1932(TP)			
		< RESISTOR >				
R801	1-249-417-11	CARBON	1K	5%	1/4W	F
R802	1-249-438-11	CARBON	56K	5%	1/4W	
R803	1-249-414-11	CARBON	560	5%	1/4W	F
			(E,EA,MY,SP,KR,MX,AR,AUS,TH)			
R803	1-249-415-11	CARBON	680	5%	1/4W	F
			(CND,AEP,UK,G,AED,CIS)			
R804	1-249-438-11	CARBON	56K	5%	1/4W	
⚠R805	1-234-499-21	ENCAPSULATED COMPONENT				
R806	1-249-417-11	CARBON	1K	5%	1/4W	F
R807	1-249-431-11	CARBON	15K	5%	1/4W	
R808	1-249-441-11	CARBON	100K	5%	1/4W	
R809	1-260-076-11	CARBON	10	5%	1/2W	
R811	1-260-076-11	CARBON	10	5%	1/2W	
R812	1-260-076-11	CARBON	10	5%	1/2W	
R814	1-249-437-11	CARBON	47K	5%	1/4W	
R815	1-249-437-11	CARBON	47K	5%	1/4W	
R821	1-260-089-11	CARBON	150	5%	1/2W	
R822	1-260-089-11	CARBON	150	5%	1/2W	
R823	1-260-089-11	CARBON	150	5%	1/2W	
R824	1-260-089-11	CARBON	150	5%	1/2W	
R825	1-249-402-11	CARBON	56	5%	1/4W	F
R826	1-249-417-11	CARBON	1K	5%	1/4W	F
R827	1-249-433-11	CARBON	22K	5%	1/4W	
R828	1-249-417-11	CARBON	1K	5%	1/4W	F
R829	1-249-437-11	CARBON	47K	5%	1/4W	
R830	1-249-417-11	CARBON	1K	5%	1/4W	F
R831	1-260-076-11	CARBON	10	5%	1/2W	
R832	1-260-076-11	CARBON	10	5%	1/2W	
R833	1-260-076-11	CARBON	10	5%	1/2W	
R834	1-260-076-11	CARBON	10	5%	1/2W	
R835	1-260-076-11	CARBON	10	5%	1/2W	
R836	1-260-076-11	CARBON	10	5%	1/2W	
R837	1-249-437-11	CARBON	47K	5%	1/4W	
R838	1-249-437-11	CARBON	47K	5%	1/4W	
R839	1-249-437-11	CARBON	47K	5%	1/4W	
R851	1-249-417-11	CARBON	1K	5%	1/4W	F
R852	1-249-438-11	CARBON	56K	5%	1/4W	
R853	1-249-414-11	CARBON	560	5%	1/4W	F
			(E,EA,MY,SP,KR,MX,AR,AUS,TH)			
R853	1-249-415-11	CARBON	680	5%	1/4W	F
			(CND,AEP,UK,G,AED,CIS)			
R854	1-249-438-11	CARBON	56K	5%	1/4W	
⚠R855	1-234-499-21	ENCAPSULATED COMPONENT				
R856	1-249-417-11	CARBON	1K	5%	1/4W	F

Ref. No.	Part No.	Description				Remarks
R857	1-249-431-11	CARBON	15K	5%	1/4W	
R858	1-249-441-11	CARBON	100K	5%	1/4W	
R859	1-260-076-11	CARBON	10	5%	1/2W	
R861	1-260-076-11	CARBON	10	5%	1/2W	
R862	1-260-076-11	CARBON	10	5%	1/2W	
R871	1-260-089-11	CARBON	150	5%	1/2W	
R872	1-260-089-11	CARBON	150	5%	1/2W	
R873	1-260-089-11	CARBON	150	5%	1/2W	
R874	1-260-089-11	CARBON	150	5%	1/2W	
R875	1-249-402-11	CARBON	56	5%	1/4W	F
R876	1-249-417-11	CARBON	1K	5%	1/4W	F
R877	1-249-433-11	CARBON	22K	5%	1/4W	
R878	1-249-417-11	CARBON	1K	5%	1/4W	F
R879	1-249-441-11	CARBON	100K	5%	1/4W	
R880	1-247-903-00	CARBON	1M	5%	1/4W	
⚠R881	1-215-889-00	METAL OXIDE	330	5%	2W	
R883	1-249-437-11	CARBON	47K	5%	1/4W	
R885	1-249-429-11	CARBON	10K	5%	1/4W	
R887	1-249-441-11	CARBON	100K	5%	1/4W	
R889	1-249-429-11	CARBON	10K	5%	1/4W	
R891	1-249-438-11	CARBON	56K	5%	1/4W	
R892	1-249-439-11	CARBON	68K	5%	1/4W	
R894	1-249-429-11	CARBON	10K	5%	1/4W	
R895	1-249-429-11	CARBON	10K	5%	1/4W	
R896	1-249-435-11	CARBON	33K	5%	1/4W	
R897	1-249-433-11	CARBON	22K	5%	1/4W	
R898	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R900	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R961	1-215-870-11	METAL OXIDE	1.5K	5%	1W	
R962	1-215-870-11	METAL OXIDE	1.5K	5%	1W	
⚠R963	1-212-881-11	FUSIBLE	100	5%	1/4W	
⚠R964	1-212-881-11	FUSIBLE	100	5%	1/4W	
R965	1-249-431-11	CARBON	15K	5%	1/4W	
R966	1-249-435-11	CARBON	33K	5%	1/4W	
R967	1-249-435-11	CARBON	33K	5%	1/4W	
⚠R968	1-202-972-61	FUSIBLE	1	5%	1/4W	
R969	1-249-439-11	CARBON	68K	5%	1/4W	
R970	1-249-433-11	CARBON	22K	5%	1/4W	
R971	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R972	1-249-433-11	CARBON	22K	5%	1/4W	
R973	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R974	1-249-429-11	CARBON	10K	5%	1/4W	
R982	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R983	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R984	1-249-429-11	CARBON	10K	5%	1/4W	
		< RELAY >				
RY881	1-755-168-11	RELAY				
		< TERMINAL >				
TM801	1-694-677-11	TERMINAL BOARD (4P)(FRONT SPEAKER)				
TM802	1-694-674-11	TERMINAL BOARD (6P) (REAR/CENTER SPEAKER)				

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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remarks
	1-676-971-11	HP BOARD			
		*********			
		< CAPACITOR >			
C1691	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1692	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1693	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN1691	1-785-316-51	PIN, CONNECTOR (STRAIGHT) 4P			
		< JACK >			
J1691	1-793-829-11	JACK, HEADPHONE (PHONES)			
**********					
	1-671-505-11	IN SW BOARD			
		**********			
		< CONNECTOR >			
* CN710	1-568-941-11	PIN, CONNECTOR 3P			
		< SWITCH >			
S703	1-771-218-11	SWITCH, MICRO (MID IN)			
S704	1-771-218-11	SWITCH, MICRO (IN)			
**********					
	1-671-502-11	INT/COUNT SW BOARD			
		**********			
S705	1-771-264-11	SWITCH, PUSH(DETECTION)(1 KEY)(INIT)			
S706	1-771-264-11	SWITCH, PUSH(DETECTION)(1 KEY)(COUNT)			
**********					
	A-2007-838-A	LEAF SW BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1001	1-107-716-11	ELECT	33uF	20.00%	10V
		< CONNECTOR >			
CN1001	1-568-860-21	SOCKET, CONNECTOR 17P			
		< DIODE >			
D1001	8-719-911-19	DIODE 1SS133T-72			
D1002	8-719-911-19	DIODE 1SS133T-72			
		< IC >			
IC1001	8-749-014-38	PHOTO INTERRUPTER SG-264			
IC1002	8-749-014-38	PHOTO INTERRUPTER SG-264			
		< TRANSISTOR >			
Q1001	8-729-029-56	TRANSISTOR DTA144ESA-TP			
		< RESISTOR >			
R1001	1-249-409-11	CARBON	220	5%	1/4W F
R1002	1-249-409-11	CARBON	220	5%	1/4W F
R1003	1-249-414-11	CARBON	560	5%	1/4W F
R1004	1-247-834-11	CARBON	1.3K	5%	1/4W
R1005	1-247-818-11	CARBON	300	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R1006	1-247-864-11	CARBON	24K	5%	1/4W
R1007	1-247-780-00	CARBON	7.5	5%	1/4W
R1008	1-249-417-11	CARBON	1K	5%	1/4W F
		< VARIABLE RESISTOR >			
RV1001	1-241-785-11	RES, ADJ, CARBON 10K			
RV1002	1-241-785-11	RES, ADJ, CARBON 10K			
		< SWITCH >			
S1001	1-570-953-11	SWITCH, PUSH (1 KEY)(A PALY)			
S1002	1-570-953-11	SWITCH, PUSH (1 KEY)(B PLAY)			
S1003	1-771-333-11	SWITCH, LEAF (A HALF)			
S1004	1-771-205-11	SWITCH, LEAF (A 120/70)			
S1005	1-771-205-11	SWITCH, LEAF (REC A)			
S1006	1-771-333-11	SWITCH, LEAF (B HALF)			
S1008	1-771-205-11	SWITCH, LEAF (B 70/120)			
S1009	1-771-205-11	SWITCH, LEAF (REC B)			
**********					
	1-671-508-11	LOAD MOTOR BOARD			
		**********			
		< CAPACITOR >			
C703	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C704	1-126-964-11	ELECT	10uF	20.00%	50V
C712	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
		< CONNECTOR >			
CN713	1-506-469-11	PIN, CONNECTOR 4P			
		< DIODE >			
D702	8-719-109-85	DIODE MTZJ-T-72-5.1B			
		< IC >			
IC702	8-759-633-65	IC M54641L			
		< RESISTOR >			
R703	1-249-411-11	CARBON	330	5%	1/4W
R704	1-249-401-11	CARBON	47	5%	1/4W F
**********					
	A-4428-625-A	MAIN BOARD, COMPLETE (CND)			
		**********			
	A-4428-951-A	MAIN BOARD, COMPLETE (E,MX,AR)			
		**********			
	A-4428-636-A	MAIN BOARD, COMPLETE (AEP,UK,G,AED,CIS)			
		**********			
	A-4428-946-A	MAIN BOARD, COMPLETE (EA)			
		**********			
	A-4428-646-A	MAIN BOARD, COMPLETE (MY,SP,KR)			
		**********			
	A-4473-255-A	MAIN BOARD, COMPLETE (TH)			
		**********			
	A-4473-948-A	MAIN BOARD, COMPLETE (AUS)			
		**********			
	4-875-327-31	HEATSINK			
	7-685-646-79	SCREW+BVTP	3X8	TYPE2 N-S	

Ref. No.	Part No.	Description			Remarks
		< CAPACITOR >			
C103	1-126-960-11	ELECT	1uF	20.00%	50V
C107	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C108	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C109	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C110	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C111	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C112	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C113	1-126-964-11	ELECT	10uF	20.00%	50V
C114	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C115	1-130-481-00	MYLAR	0.0068uF	5%	50V
C116	1-130-481-00	MYLAR	0.0068uF	5%	50V
C117	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C118	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C119	1-136-159-00	MYLAR	0.033uF	5.00%	50V
C120	1-126-964-11	ELECT	10uF	20.00%	50V
C121	1-126-964-11	ELECT	10uF	20.00%	50V
C122	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C123	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C124	1-126-960-11	ELECT	1uF	20.00%	50V
C125	1-104-665-11	ELECT	100uF	20.00%	10V
C126	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C127	1-104-664-11	ELECT	47uF	20.00%	16V
C128	1-104-664-11	ELECT	47uF	20.00%	16V
C129	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C132	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C137	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C138	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C142	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C144	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C146	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C153	1-126-960-11	ELECT	1uF	20.00%	50V
C155	1-126-964-11	ELECT	10uF	20.00%	50V
C157	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C158	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C159	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C160	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C161	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C162	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C163	1-126-964-11	ELECT	10uF	20.00%	50V
C164	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C165	1-130-481-00	MYLAR	0.0068uF	5%	50V
C166	1-130-481-00	MYLAR	0.0068uF	5%	50V
C167	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C168	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C169	1-136-159-00	MYLAR	0.033uF	5.00%	50V
C170	1-126-964-11	ELECT	10uF	20.00%	50V
C171	1-126-964-11	ELECT	10uF	20.00%	50V
C172	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C173	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C174	1-126-960-11	ELECT	1uF	20.00%	50V
C175	1-104-665-11	ELECT	100uF	20.00%	10V
C181	1-109-889-11	ELECT	1uF	20.00%	50V
C192	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C194	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C196	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C197	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C201	1-126-960-11	ELECT	1uF	20.00%	50V
C202	1-126-960-11	ELECT	1uF	20.00%	50V
C203	1-126-959-11	ELECT	0.47uF	20.00%	50V
C204	1-126-959-11	ELECT	0.47uF	20.00%	50V
C205	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C206	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C207	1-126-959-11	ELECT	0.47uF	20.00%	50V
C208	1-126-959-11	ELECT	0.47uF	20.00%	50V
C209	1-126-959-11	ELECT	0.47uF	20.00%	50V
C210	1-126-959-11	ELECT	0.47uF	20.00%	50V
C211	1-126-959-11	ELECT	0.47uF	20.00%	50V
C212	1-126-959-11	ELECT	0.47uF	20.00%	50V
C213	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C214	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C216	1-126-960-11	ELECT	1uF	20.00%	50V
C217	1-130-479-00	MYLAR	0.0047uF	5%	50V
C218	1-130-471-00	MYLAR	0.001uF	5%	50V
C219	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C220	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C221	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C222	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C223	1-130-479-00	MYLAR	0.0047uF	5%	50V
C224	1-130-471-00	MYLAR	0.001uF	5%	50V
C225	1-126-960-11	ELECT	1uF	20.00%	50V
C226	1-130-480-00	MYLAR	0.0056uF	5%	50V
C227	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C228	1-136-175-00	MYLAR	0.68uF	5.00%	50V
C229	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C230	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C231	1-126-963-11	ELECT	4.7uF	20.00%	50V
C232	1-126-963-11	ELECT	4.7uF	20.00%	50V
C233	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C234	1-136-169-00	MYLAR	0.22uF	5.00%	50V
C235	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C236	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C237	1-136-161-00	MYLAR	0.047uF	5.00%	50V
C238	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C239	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C240	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C241	1-136-157-00	MYLAR	0.022uF	5.00%	50V
C242	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C243	1-130-469-00	MYLAR	680PF	5%	50V
C244	1-136-153-00	FILM	0.01uF	5%	50V
C245	1-136-153-00	FILM	0.01uF	5%	50V
C246	1-130-469-00	MYLAR	680PF	5%	50V
C247	1-136-153-00	FILM	0.01uF	5%	50V
C248	1-136-153-00	FILM	0.01uF	5%	50V
C249	1-104-664-11	ELECT	47uF	20.00%	16V
C250	1-130-481-00	MYLAR	0.0068uF	5%	50V

MAIN

Ref. No.	Part No.	Description			Remarks
C251	1-126-963-11	ELECT	4.7uF	20.00%	50V
C252	1-126-934-11	ELECT	220uF	20.00%	16V
C253	1-126-934-11	ELECT	220uF	20.00%	16V
C255	1-126-964-11	ELECT	10uF	20.00%	50V
C256	1-126-964-11	ELECT	10uF	20.00%	50V
C257	1-126-964-11	ELECT	10uF	20.00%	50V
C258	1-126-964-11	ELECT	10uF	20.00%	50V
C259	1-126-964-11	ELECT	10uF	20.00%	50V
C260	1-126-964-11	ELECT	10uF	20.00%	50V
C261	1-126-964-11	ELECT	10uF	20.00%	50V
C264	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C266	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C267	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C268	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C269	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C270	1-136-162-00	MYLAR	0.056uF	5.00%	50V
C271	1-126-960-11	ELECT	1uF	20.00%	50V
C272	1-126-960-11	ELECT	1uF	20.00%	50V
C273	1-126-960-11	ELECT	1uF	20.00%	50V
C274	1-126-960-11	ELECT	1uF	20.00%	50V
C281	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C282	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C283	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C284	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C285	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C286	1-163-001-11	CERAMIC CHIP	220PF	10%	50V (AEP,UK,G,AED,CIS)
C287	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C301	1-126-960-11	ELECT	1uF	20.00%	50V
C302	1-130-479-00	MYLAR	0.0047uF	5%	50V
C303	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C304	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C305	1-126-964-11	ELECT	10uF	20.00%	50V
C306	1-126-960-11	ELECT	1uF	20.00%	50V
C307	1-126-959-11	ELECT	0.47uF	20.00%	50V
C308	1-126-964-11	ELECT	10uF	20.00%	50V
C309	1-137-194-81	MYLAR	0.47uF	5.00%	50V
C310	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C311	1-126-964-11	ELECT	10uF	20.00%	50V
C312	1-126-959-11	ELECT	0.47uF	20.00%	50V
C313	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C314	1-126-964-11	ELECT	10uF	20.00%	50V
C315	1-126-963-11	ELECT	4.7uF	20.00%	50V
C316	1-126-933-11	ELECT	100uF	20.00%	16V
C317	1-104-665-11	ELECT	100uF	20.00%	10V
C318	1-126-959-11	ELECT	0.47uF	20.00%	50V
C319	1-126-959-11	ELECT	0.47uF	20.00%	50V
C321	1-126-964-11	ELECT	10uF	20.00%	50V
C322	1-126-964-11	ELECT	10uF	20.00%	50V
C351	1-126-960-11	ELECT	1uF	20.00%	50V
C352	1-130-479-00	MYLAR	0.0047uF	5%	50V

Ref. No.	Part No.	Description			Remarks
C353	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C354	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C355	1-126-964-11	ELECT	10uF	20.00%	50V
C356	1-126-960-11	ELECT	1uF	20.00%	50V
C357	1-126-959-11	ELECT	0.47uF	20.00%	50V
C358	1-126-964-11	ELECT	10uF	20.00%	50V
C359	1-137-194-81	MYLAR	0.47uF	5.00%	50V
C360	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C362	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C363	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C368	1-126-959-11	ELECT	0.47uF	20.00%	50V
C369	1-126-959-11	ELECT	0.47uF	20.00%	50V
C410	1-163-233-11	CERAMIC CHIP	18PF	5.00%	50V
C411	1-163-233-11	CERAMIC CHIP	18PF	5.00%	50V
C414	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C416	1-126-916-11	ELECT	1000uF	20.00%	6.3V
C462	1-104-665-11	ELECT	100uF	20.00%	10V
C464	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C497	1-126-964-11	ELECT	10uF	20.00%	50V
C498	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C499	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C501	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C502	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C503	1-126-964-11	ELECT	10uF	20.00%	50V
C511	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C521	1-104-665-11	ELECT	100uF	20.00%	10V
C531	1-163-033-91	CERAMIC CHIP	0.022uF	50V	
C532	1-126-935-11	ELECT	470uF	20.00%	6.3V
C533	1-163-033-91	CERAMIC CHIP	0.022uF	50V	
C534	1-126-916-11	ELECT	1000uF	20.00%	6.3V
C536	1-126-925-11	ELECT	470uF	20.00%	10V
C551	1-104-665-11	ELECT	100uF	20.00%	10V
C901	1-126-937-11	ELECT	4700uF	20.00%	16V
C902	1-126-768-11	ELECT	2200uF	20.00%	16V (CND,AEP,UK,G,AED,CIS)
C903	1-126-964-11	ELECT	10uF	20.00%	50V
C904	1-126-964-11	ELECT	10uF	20.00%	50V
C905	1-126-964-11	ELECT	10uF	20.00%	50V
C906	1-126-964-11	ELECT	10uF	20.00%	50V
C907	1-126-924-11	ELECT	330uF	20.00%	6.3V
C908	1-126-924-11	ELECT	330uF	20.00%	6.3V
C909	1-126-964-11	ELECT	10uF	20.00%	50V
C911	1-126-916-11	ELECT	1000uF	20.00%	6.3V
C912	1-104-665-11	ELECT	100uF	20.00%	10V
C914	1-126-916-11	ELECT	1000uF	20.00%	6.3V
C915	1-126-916-11	ELECT	1000uF	20.00%	6.3V
C920	1-126-943-11	ELECT	2200uF	20.00%	25V
C921	1-126-956-91	ELECT	0.1uF	20.00%	50V
C922	1-126-767-11	ELECT	1000uF	20.00%	16V
C924	1-126-956-91	ELECT	0.1uF	20.00%	50V
C925	1-126-935-11	ELECT	470uF	20.00%	16V
C931	1-126-964-11	ELECT	10uF	20.00%	50V
C932	1-126-935-11	ELECT	470uF	20.00%	16V
C941	1-163-038-91	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description	Remarks
		< CONNECTOR >	
CN103	1-785-316-41	PIN, CONNECTOR (STRAIGHT) 4P	(EA,MY,SP,KR,TH)
CN304	1-784-778-11	CONNECTOR, FFC 17P	
CN305	1-784-776-11	CONNECTOR, FFC 15P	
CN502	1-784-776-11	CONNECTOR, FFC 15P (AEP,UK,G,AED,CIS)	
CN502	1-784-774-11	CONNECTOR, FFC 13P	(CND,E,EA,MY,SP,KR,MX,AR,AUS,TH)
CN503	1-568-830-11	CONNECTOR, FFC 11P	
CN521	1-785-316-11	PIN, CONNECTOR (STRAIGHT) 4P	
CN522	1-784-739-11	CONNECTOR, FFC 17P	
CN523	1-784-741-11	CONNECTOR, FFC 19P	
CN901	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P	
CN902	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P	
* CN941	1-564-518-11	PLUG, CONNECTOR 3P	
		< DIODE >	
D101	8-719-988-61	DIODE 1SS355TE-17	
D102	8-719-988-61	DIODE 1SS355TE-17	
D181	8-719-988-61	DIODE 1SS355TE-17	
D182	8-719-988-61	DIODE 1SS355TE-17	
D183	8-719-988-61	DIODE 1SS355TE-17	
D201	8-719-988-61	DIODE 1SS355TE-17	
D501	8-719-988-61	DIODE 1SS355TE-17	
D502	8-719-988-61	DIODE 1SS355TE-17	
D503	8-719-988-61	DIODE 1SS355TE-17	
D504	8-719-988-61	DIODE 1SS355TE-17	
D505	8-719-988-61	DIODE 1SS355TE-17	
D506	8-719-988-61	DIODE 1SS355TE-17	
D507	8-719-210-33	DIODE EC10DS2-TE12L5	
D508	8-719-988-61	DIODE 1SS355TE-17 (CND,AEP,UK,G,AED,CIS)	
D509	8-719-988-61	DIODE 1SS355TE-17 (CND,AEP,UK,G,AED,CIS)	
D510	8-719-988-61	DIODE 1SS355TE-17	
D512	8-719-210-33	DIODE EC10DS2-TE12L5	(CND,AEP,UK,G,AED,CIS)
D912	8-719-210-33	DIODE EC10DS2-TE12L5	
D913	8-719-210-33	DIODE EC10DS2-TE12L5	
D914	8-719-210-33	DIODE EC10DS2-TE12L5	
D951	8-719-988-61	DIODE 1SS355TE-17	
D952	8-719-210-33	DIODE EC10DS2-TE12L5	
		< EARTH >	
* EP901	1-537-738-21	TERMINAL, EARTH	
* EP902	1-537-738-21	TERMINAL, EARTH	
		< FERRITE BEAD >	
FB416	1-414-772-11	FERRITE 0UH	
FB462	1-414-772-11	FERRITE 0UH	
FB499	1-414-772-11	FERRITE 0UH	
FB532	1-414-551-11	FERRITE 0UH	
FB533	1-414-772-11	FERRITE 0UH	
FB534	1-414-772-11	FERRITE 0UH	

Ref. No.	Part No.	Description	Remarks
		< IC >	
IC101	8-759-663-66	IC M61502FP	
IC201	8-759-571-51	IC M62464FP	
IC203	8-759-636-55	IC M5218AFP-T1	
IC204	8-759-636-55	IC M5218AFP-T1	
IC301	8-759-652-02	IC HA12226F	
IC401	8-759-664-39	IC M30620MCA-A35FP	
IC501	8-759-635-63	IC M51943BSL-TP	
IC551	8-749-923-04	IC TOTX178A (CD DIGITAL OUT)	
IC901	8-759-231-53	IC M5F7805L	
IC902	8-759-701-65	IC M5F79M05L	
IC903	8-759-158-62	IC TA78057S	
IC905	8-759-464-03	IC uPC29M12HF	
IC906	8-759-604-86	IC M5F7807L	
IC907	8-759-604-32	IC M5F7810L	
		< JACK >	
J101	1-774-411-11	JACK, PIN 6P (VIDEO/MD)	
J102	1-770-377-31	JACK, PIN 1P (WOOFER)	
J703	1-779-380-11	JACK, PIN 6P (FRONT/REAR/DVD)	
		< JUMPER RESISTOR >	
JR1	1-216-295-91	SHORT 0	
JR2	1-216-295-91	SHORT 0	
JR3	1-216-295-91	SHORT 0	
JR7	1-216-295-91	SHORT 0	
JR9	1-216-296-91	SHORT 0	
JR10	1-216-296-91	SHORT 0	
JR12	1-216-295-91	SHORT 0	
JR13	1-216-296-91	SHORT 0	
JR14	1-216-295-91	SHORT 0	
JR17	1-216-295-91	SHORT 0	
JR18	1-216-296-91	SHORT 0 (EA,MY,SP,KR,TH)	
JR19	1-216-295-91	SHORT 0	
JR21	1-216-295-91	SHORT 0	
JR22	1-216-296-91	SHORT 0	
JR24	1-216-296-91	SHORT 0	
JR25	1-216-296-91	SHORT 0	
JR26	1-216-295-91	SHORT 0	
JR27	1-216-295-91	SHORT 0	
JR28	1-216-295-91	SHORT 0	
JR29	1-216-296-91	SHORT 0	
JR30	1-216-295-91	SHORT 0	
JR31	1-216-296-91	SHORT 0	
JR32	1-216-295-91	SHORT 0	
JR33	1-216-296-91	SHORT 0	
JR34	1-216-296-91	SHORT 0	
JR35	1-216-296-91	SHORT 0	
JR36	1-216-296-91	SHORT 0	
JR37	1-216-296-91	SHORT 0	
JR38	1-216-296-91	SHORT 0	
JR39	1-216-296-91	SHORT 0	
JR40	1-216-296-91	SHORT 0	
JR41	1-216-296-91	SHORT 0	
JR42	1-216-296-91	SHORT 0	
JR43	1-216-295-91	SHORT 0	
JR44	1-216-296-91	SHORT 0	

MAIN

Ref. No.	Part No.	Description	Remarks
JR45	1-216-295-91	SHORT 0	
JR47	1-216-296-91	SHORT 0	
JR48	1-216-296-91	SHORT 0	
JR49	1-216-296-91	SHORT 0	
JR50	1-216-296-91	SHORT 0	
JR51	1-216-295-91	SHORT 0	
JR52	1-216-295-91	SHORT 0	
JR53	1-216-295-91	SHORT 0	
JR54	1-216-295-91	SHORT 0	
JR55	1-216-296-91	SHORT 0	
JR101	1-216-295-91	SHORT 0 (CND,AEP,UK,G,AED,CIS)	
JR500	1-216-295-91	SHORT 0 (E,EA,MY,SP,KR,MX,AR,AUS,TH)	
JR501	1-216-295-91	SHORT 0 (AEP,UK,G,AED,CIS)	
JR502	1-216-295-91	SHORT 0 (AEP,UK,G,AED,CIS)	
JR503	1-216-295-91	SHORT 0 (AEP,UK,G,AED,CIS)	
JR511	1-216-295-91	SHORT 0	
JR901	1-216-296-91	SHORT 0	
JR923	1-216-296-91	SHORT 0(CND,E,EA,MY,SP,KR,MX,AR,AUS,TH)	
JR924	1-216-296-91	SHORT 0(CND,E,EA,MY,SP,KR,MX,AR,AUS,TH)	
		< COIL >	
L201	1-410-393-11	INDUCTOR CHIP 100uH	
L551	1-410-393-11	INDUCTOR CHIP 100uH	
L552	1-410-393-11	INDUCTOR CHIP 100uH	
		< TRANSISTOR >	
Q101	8-729-120-28	TRANSISTOR 2SC3052EF-T1-LEF	
Q102	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q130	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q151	8-729-120-28	TRANSISTOR 2SC3052EF-T1-LEF	
Q152	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q181	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q182	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q183	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q184	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q201	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q202	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q203	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q391	8-729-140-04	TRANSISTOR 2SB1116-TP-LK	
Q392	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q393	8-729-140-04	TRANSISTOR 2SB1116-TP-LK	
Q394	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q395	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q396	8-729-116-59	TRANSISTOR 2SB1068TP	
Q397	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q501	8-729-120-28	TRANSISTOR 2SC3052EF-T1-LEF	
Q901	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q902	8-729-027-31	TRANSISTOR DTA124EKA-T146	
Q903	8-729-040-19	TRANSISTOR RT1N137L-TP	
Q904	8-729-901-00	TRANSISTOR DTC124EKA-T146	
Q905	8-729-600-22	TRANSISTOR 2SA1235TP-1EF	
Q906	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q910	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q911	8-729-901-00	TRANSISTOR DTC124EKA-T146	
Q912	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q913	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q921	8-729-052-12	TRANSISTOR ZSB1568	
Q922	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q941	8-729-111-29	TRANSISTOR 2SD1616A-TP-LK	
Q942	8-729-600-22	TRANSISTOR 2SA1235TP-1EF	
		< RESISTOR >	
R101	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R102	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R103	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R104	1-216-121-91	RES-CHIP 1M 5% 1/10W	
R105	1-216-113-00	METAL CHIP 470K 5% 1/10W	
R106	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R107	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R109	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R110	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R111	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R112	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R121	1-216-025-91	RES-CHIP 100 5% 1/10W	
R122	1-216-025-91	RES-CHIP 100 5% 1/10W	
R123	1-216-025-91	RES-CHIP 100 5% 1/10W	
R124	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R131	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R132	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R133	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R134	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R135	1-216-097-91	RES-CHIP 100K 5% 1/10W (EA,MY,SP,KR,TH)	
R136	1-216-073-00	METAL CHIP 10K 5% 1/10W (EA,MY,SP,KR,TH)	
R137	1-216-174-00	RES-CHIP 100 5% 1/8W (EA,MY,SP,KR,TH)	
R141	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R142	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R143	1-216-071-00	METAL CHIP 8.2K 5% 1/10W	
R144	1-216-077-91	RES-CHIP 15K 5% 1/10W	
R145	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R146	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R151	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R152	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R153	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R154	1-216-121-91	RES-CHIP 1M 5% 1/10W	
R155	1-216-113-00	METAL CHIP 470K 5% 1/10W	
R156	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R157	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R159	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R160	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R161	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R162	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R181	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R182	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R183	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R191	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R192	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R193	1-216-071-00	METAL CHIP 8.2K 5% 1/10W	
R194	1-216-077-91	RES-CHIP 15K 5% 1/10W	
R195	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R196	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R201	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R202	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	

Ref. No.	Part No.	Description			Remarks
R203	1-216-073-00	METAL CHIP	10K	5%	1/10W
R204	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R205	1-216-097-91	RES-CHIP	100K	5%	1/10W
R206	1-216-073-00	METAL CHIP	10K	5%	1/10W
R207	1-216-089-91	RES-CHIP	47K	5%	1/10W
R208	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R209	1-216-073-00	METAL CHIP	10K	5%	1/10W
R210	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R211	1-216-097-91	RES-CHIP	100K	5%	1/10W
R212	1-216-073-00	METAL CHIP	10K	5%	1/10W
R213	1-216-089-91	RES-CHIP	47K	5%	1/10W
R214	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R215	1-216-073-00	METAL CHIP	10K	5%	1/10W
R216	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R217	1-216-097-91	RES-CHIP	100K	5%	1/10W
R218	1-216-073-00	METAL CHIP	10K	5%	1/10W
R219	1-216-089-91	RES-CHIP	47K	5%	1/10W
R220	1-216-073-00	METAL CHIP	10K	5%	1/10W
R221	1-216-073-00	METAL CHIP	10K	5%	1/10W
R222	1-216-025-91	RES-CHIP	100	5%	1/10W
R223	1-216-025-91	RES-CHIP	100	5%	1/10W
R224	1-216-025-91	RES-CHIP	100	5%	1/10W
R225	1-216-109-00	METAL CHIP	330K	5%	1/10W
R226	1-216-089-91	RES-CHIP	47K	5%	1/10W
R227	1-216-094-00	RES-CHIP	75K	5%	1/10W
R228	1-216-089-91	RES-CHIP	47K	5%	1/10W
R229	1-216-094-00	RES-CHIP	75K	5%	1/10W
R230	1-216-101-00	METAL CHIP	150K	5%	1/10W
R231	1-216-101-00	METAL CHIP	150K	5%	1/10W
R232	1-216-097-91	RES-CHIP	100K	5%	1/10W
R233	1-216-097-91	RES-CHIP	100K	5%	1/10W
R234	1-216-097-91	RES-CHIP	100K	5%	1/10W
R235	1-216-097-91	RES-CHIP	100K	5%	1/10W
R271	1-216-077-91	RES-CHIP	15K	5%	1/10W
R272	1-216-077-91	RES-CHIP	15K	5%	1/10W
R273	1-216-077-91	RES-CHIP	15K	5%	1/10W
R274	1-216-077-91	RES-CHIP	15K	5%	1/10W
R275	1-216-077-91	RES-CHIP	15K	5%	1/10W
R276	1-216-077-91	RES-CHIP	15K	5%	1/10W
R277	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R278	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R279	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R280	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R281	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R283	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R301	1-216-085-00	METAL CHIP	33K	5%	1/10W
R302	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R303	1-216-025-91	RES-CHIP	100	5%	1/10W
R304	1-216-025-91	RES-CHIP	100	5%	1/10W
R305	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R306	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R307	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R308	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R309	1-216-081-00	METAL CHIP	22K	5%	1/10W
R311	1-216-121-91	RES-CHIP	1M	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R312	1-216-102-00	RES-CHIP	160K	5%	1/10W
R313	1-216-097-91	RES-CHIP	100K	5%	1/10W
R315	1-216-073-00	METAL CHIP	10K	5%	1/10W
R316	1-216-086-00	RES-CHIP	36K	5%	1/10W
R317	1-216-073-00	METAL CHIP	10K	5%	1/10W
R318	1-216-073-00	METAL CHIP	10K	5%	1/10W
R319	1-216-111-00	METAL CHIP	390K	5%	1/10W
R320	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R321	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R323	1-216-089-91	RES-CHIP	47K	5%	1/10W
R324	1-216-089-91	RES-CHIP	47K	5%	1/10W
R351	1-216-085-00	METAL CHIP	33K	5%	1/10W
R352	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R353	1-216-025-91	RES-CHIP	100	5%	1/10W
R354	1-216-025-91	RES-CHIP	100	5%	1/10W
R355	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R356	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R357	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R358	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R359	1-216-085-00	METAL CHIP	33K	5%	1/10W
R360	1-216-045-00	METAL CHIP	680	5%	1/10W
R361	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R363	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R364	1-216-045-00	METAL CHIP	680	5%	1/10W
R366	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R367	1-216-089-91	RES-CHIP	47K	5%	1/10W
R368	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R369	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R371	1-216-238-91	RES-CHIP	47K	5%	1/8W
R372	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R373	1-216-049-91	RES-CHIP	1K	5%	1/10W
R374	1-216-089-91	RES-CHIP	47K	5%	1/10W
R375	1-216-094-00	RES-CHIP	75K	5%	1/10W
R376	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R377	1-216-089-91	RES-CHIP	47K	5%	1/10W
R378	1-216-094-00	RES-CHIP	75K	5%	1/10W
R400	1-216-025-91	RES-CHIP	100	5%	1/10W
R401	1-216-025-91	RES-CHIP	100	5%	1/10W
R402	1-216-025-91	RES-CHIP	100	5%	1/10W
R403	1-216-025-91	RES-CHIP	100	5%	1/10W
R404	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R406	1-216-025-91	RES-CHIP	100	5%	1/10W
R407	1-216-025-91	RES-CHIP	100	5%	1/10W
R408	1-216-025-91	RES-CHIP	100	5%	1/10W
R409	1-216-073-00	METAL CHIP	10K	5%	1/10W
R411	1-216-109-00	METAL CHIP	330K	5%	1/10W
R412	1-216-025-91	RES-CHIP	100	5%	1/10W
R413	1-216-295-91	SHORT 0			
R416	1-216-073-00	METAL CHIP	10K	5%	1/10W
R417	1-216-073-00	METAL CHIP	10K	5%	1/10W
R418	1-216-025-91	RES-CHIP	100	5%	1/10W
R419	1-216-025-91	RES-CHIP	100	5%	1/10W
R420	1-216-025-91	RES-CHIP	100	5%	1/10W (AEP,UK,G,AED,CIS)
R421	1-216-025-91	RES-CHIP	100	5%	1/10W (AEP,UK,G,AED,CIS)
R422	1-216-065-91	RES-CHIP	4.7K	5%	1/10W

MAIN **MIC**

Ref. No.	Part No.	Description			Remarks
R423	1-216-025-91	RES-CHIP	100	5%	1/10W
R424	1-216-025-91	RES-CHIP	100	5%	1/10W
R425	1-216-025-91	RES-CHIP	100	5%	1/10W
R426	1-216-025-91	RES-CHIP	100	5%	1/10W
R428	1-216-025-91	RES-CHIP	100	5%	1/10W
R429	1-216-001-00	METAL CHIP	10	5%	1/10W
R430	1-216-001-00	METAL CHIP	10	5%	1/10W
R431	1-216-025-91	RES-CHIP	100	5%	1/10W
R432	1-216-025-91	RES-CHIP	100	5%	1/10W
R433	1-216-025-91	RES-CHIP	100	5%	1/10W
R434	1-216-025-91	RES-CHIP	100	5%	1/10W
R435	1-216-025-91	RES-CHIP	100	5%	1/10W
R436	1-216-073-00	METAL CHIP	10K	5%	1/10W
R437	1-216-073-00	METAL CHIP	10K	5%	1/10W
R438	1-216-049-91	RES-CHIP	1K	5%	1/10W
R439	1-216-073-00	METAL CHIP	10K	5%	1/10W
R440	1-216-222-00	RES-CHIP	10K	5%	1/8W
R446	1-216-025-91	RES-CHIP	100	5%	1/10W
R447	1-216-025-91	RES-CHIP	100	5%	1/10W
R448	1-216-025-91	RES-CHIP	100	5%	1/10W
R449	1-216-025-91	RES-CHIP	100	5%	1/10W
R450	1-216-025-91	RES-CHIP	100	5%	1/10W
R451	1-216-025-91	RES-CHIP	100	5%	1/10W
R452	1-216-025-91	RES-CHIP	100	5%	1/10W
R453	1-216-073-00	METAL CHIP	10K	5%	1/10W
R454	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R455	1-216-073-00	METAL CHIP	10K	5%	1/10W
R463	1-216-025-91	RES-CHIP	100	5%	1/10W
R469	1-216-025-91	RES-CHIP	100	5%	1/10W
R470	1-216-025-91	RES-CHIP	100	5%	1/10W
R471	1-216-174-00	RES-CHIP	100	5%	1/8W
R472	1-216-025-91	RES-CHIP	100	5%	1/10W
R473	1-216-025-91	RES-CHIP	100	5%	1/10W
R474	1-216-025-91	RES-CHIP	100	5%	1/10W
R475	1-216-025-91	RES-CHIP	100	5%	1/10W
R476	1-216-025-91	RES-CHIP	100	5%	1/10W
R477	1-216-025-91	RES-CHIP	100	5%	1/10W
R478	1-216-025-91	RES-CHIP	100	5%	1/10W
R479	1-216-025-91	RES-CHIP	100	5%	1/10W
R480	1-216-025-91	RES-CHIP	100	5%	1/10W
R481	1-216-025-91	RES-CHIP	100	5%	1/10W
R482	1-216-025-91	RES-CHIP	100	5%	1/10W
R483	1-216-025-91	RES-CHIP	100	5%	1/10W
R484	1-216-025-91	RES-CHIP	100	5%	1/10W
R485	1-216-025-91	RES-CHIP	100	5%	1/10W
R486	1-216-025-91	RES-CHIP	100	5%	1/10W
R487	1-216-025-91	RES-CHIP	100	5%	1/10W
R488	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R489	1-216-025-91	RES-CHIP	100	5%	1/10W
R490	1-216-025-91	RES-CHIP	100	5%	1/10W
R491	1-216-025-91	RES-CHIP	100	5%	1/10W
R492	1-216-089-91	RES-CHIP	47K	5%	1/10W
R493	1-216-085-00	METAL CHIP	33K	5%	1/10W
					(AEP,UK,G,AED,CIS)
R493	1-216-089-91	RES-CHIP	47K	5%	1/10W
					(E,EA,MY,SP,KR,MX,AR,AUS,TH)
R493	1-216-073-00	METAL CHIP	10K	5%	1/10W
					(CND)
R494	1-216-073-00	METAL CHIP	10K	5%	1/10W
					(EA)
R494	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
					(MY,SP,KR,AUS,TH)
R494	1-216-081-00	METAL CHIP	22K	5%	1/10W
					(E,MX,AR)
R494	1-216-089-91	RES-CHIP	47K	5%	1/10W
					(CND,AEP,UK,G,AED,CIS)
R495	1-216-025-91	RES-CHIP	100	5%	1/10W
R497	1-216-025-91	RES-CHIP	100	5%	1/10W
R501	1-216-073-00	METAL CHIP	10K	5%	1/10W
R502	1-216-089-91	RES-CHIP	47K	5%	1/10W
R503	1-216-089-91	RES-CHIP	47K	5%	1/10W
R504	1-216-025-91	RES-CHIP	100	5%	1/10W
R505	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R506	1-216-041-00	METAL CHIP	470	5%	1/10W
R521	1-216-222-00	RES-CHIP	10K	5%	1/8W
R522	1-216-222-00	RES-CHIP	10K	5%	1/8W
R523	1-216-222-00	RES-CHIP	10K	5%	1/8W
R524	1-216-222-00	RES-CHIP	10K	5%	1/8W
R525	1-216-073-00	METAL CHIP	10K	5%	1/10W
R526	1-216-073-00	METAL CHIP	10K	5%	1/10W
R527	1-216-073-00	METAL CHIP	10K	5%	1/10W
R528	1-216-073-00	METAL CHIP	10K	5%	1/10W
R529	1-216-073-00	METAL CHIP	10K	5%	1/10W
R530	1-216-073-00	METAL CHIP	10K	5%	1/10W
R531	1-216-073-00	METAL CHIP	10K	5%	1/10W
R541	1-216-025-91	RES-CHIP	100	5%	1/10W
R542	1-216-025-91	RES-CHIP	100	5%	1/10W
R901	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R902	1-216-081-00	METAL CHIP	22K	5%	1/10W
R903	1-216-049-91	RES-CHIP	1K	5%	1/10W
R907	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R941	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R942	1-216-097-91	RES-CHIP	100K	5%	1/10W
R943	1-216-065-91	RES-CHIP	4.7K	5%	1/10W

< VARIABLE RESISTOR >

RV301	1-238-600-11	RES, ADJ, CARBON 10K			
RV351	1-238-600-11	RES, ADJ, CARBON 10K			

< VIBRATOR >

X401	1-567-098-41	VIBRATOR, CRYSTAL 32.768KHz			
X402	1-781-107-21	VIBRATOR, SERAMIC 16MHz			

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	1-676-972-11	MIC BOARD (EA,MY,SP,KR,TH)			

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< CAPACITOR >

C1601	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1602	1-126-961-11	ELECT	2.2uF	20.00%	50V
C1603	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1604	1-162-215-31	CERAMIC	47PF	5%	50V
C1605	1-162-290-31	CERAMIC	470PF	10%	50V
C1606	1-126-959-11	ELECT	0.47uF	20.00%	50V
C1607	1-162-215-31	CERAMIC	47PF	5%	50V
C1608	1-162-282-31	CERAMIC	100PF	10%	50V
C1609	1-126-961-11	ELECT	2.2uF	20.00%	50V
C1610	1-126-964-11	ELECT	10uF	20.00%	50V

Ref. No.	Part No.	Description			Remarks
C1611	1-126-964-11	ELECT	10uF	20.00%	50V
C1612	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1613	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C1614	1-164-159-11	CERAMIC	0.1uF		50V
		< IC >			
IC1601	8-759-634-51	IC M5218AP			
		< JACK >			
J1601	1-793-829-11	JACK, HEADPHONE (MIC1)			
		< RESISTOR >			
R1601	1-249-429-11	CARBON	10K	5%	1/4W
R1602	1-249-417-11	CARBON	1K	5%	1/4W F
R1603	1-249-441-11	CARBON	100K	5%	1/4W
R1604	1-249-417-11	CARBON	1K	5%	1/4W F
R1605	1-249-433-11	CARBON	22K	5%	1/4W
R1606	1-249-429-11	CARBON	10K	5%	1/4W
R1607	1-247-885-00	CARBON	180K	5%	1/4W
R1608	1-247-807-31	CARBON	100	5%	1/4W
		< VARIABLE RESISTOR >			
RV1601	1-227-171-11	RES, VAR CARBON 50K			
**********					
	1-671-503-11	OUT SW BOARD			
		**********			
		< CONNECTOR >			
* CN709	1-568-943-11	PIN, CONNECTOR 5P			
CN715	1-506-481-11	PIN, CONNECTOR 2P			
		< SWITCH >			
S701	1-771-218-11	SWITCH, MICRO (MID OUT)			
S702	1-771-218-11	SWITCH, MICRO (LID)			
S708	1-771-218-11	SWITCH, MICRO (OUT)			
**********					
	A-4428-626-A	PANEL BOARD, COMPLETE (CND,AEP,UK,G,AED,CIS,E,MX,AR,AUS)			
		**********			
	A-4428-953-A	PANEL BOARD, COMPLETE (EA,MY,SP,KR)			
		**********			
	A-4473-245-A	PANEL BOARD, COMPLETE (TH)			
		**********			
	4-226-723-01	HOLDER(FL)			
	4-949-935-41	CUSHION (FL)			
		< CAPACITOR >			
C691	1-162-286-31	CERAMIC	220PF	10%	50V
C692	1-162-286-31	CERAMIC	220PF	10%	50V
C701	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C702	1-124-589-11	ELECT	47uF	20%	16V
C703	1-162-290-31	CERAMIC	470PF	10%	50V
C704	1-162-294-31	CERAMIC	0.001uF	10%	50V
C705	1-162-294-31	CERAMIC	0.001uF	10%	50V
C711	1-162-286-31	CERAMIC	220PF	10%	50V
C712	1-162-286-31	CERAMIC	220PF	10%	50V
C713	1-162-286-31	CERAMIC	220PF	10%	50V

Ref. No.	Part No.	Description			Remarks
C714	1-162-286-31	CERAMIC	220PF	10%	50V
C715	1-162-286-31	CERAMIC	220PF	10%	50V
C716	1-162-286-31	CERAMIC	220PF	10%	50V
C717	1-162-286-31	CERAMIC	220PF	10%	50V
C718	1-162-286-31	CERAMIC	220PF	10%	50V
C719	1-162-286-31	CERAMIC	220PF	10%	50V
C720	1-162-286-31	CERAMIC	220PF	10%	50V
C721	1-162-286-31	CERAMIC	220PF	10%	50V
C722	1-162-286-31	CERAMIC	220PF	10%	50V
C723	1-162-286-31	CERAMIC	220PF	10%	50V
C724	1-162-286-31	CERAMIC	220PF	10%	50V
C725	1-162-286-31	CERAMIC	220PF	10%	50V
C726	1-162-286-31	CERAMIC	220PF	10%	50V
C727	1-162-286-31	CERAMIC	220PF	10%	50V
C728	1-162-286-31	CERAMIC	220PF	10%	50V
C731	1-124-261-00	ELECT	10uF	20%	50V
C732	1-124-261-00	ELECT	10uF	20%	50V
C751	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C752	1-124-589-11	ELECT	47uF	20%	16V
C755	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C756	1-124-261-00	ELECT	10uF	20%	50V
C757	1-162-290-31	CERAMIC	470PF	10%	50V
C761	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C762	1-124-261-00	ELECT	10uF	20%	50V
C763	1-126-163-11	ELECT	4.7uF	20%	50V
C764	1-162-303-11	CERAMIC	0.0033uF	30.00%	16V
C765	1-124-261-00	ELECT	10uF	20%	50V
C766	1-124-261-00	ELECT	10uF	20%	50V (EA,MY,SP,KR,TH)
C767	1-124-261-00	ELECT	10uF	20%	50V
		< CONNECTOR >			
CN701	1-784-733-11	CONNECTOR, FFC 11P			
CN702	1-785-334-11	PIN, CONNECTOR (LIGHT ANGLE)8P			
CN703	1-785-337-11	PIN, CONNECTOR(LIGHT ANGLE)11P			
CN704	1-785-333-11	PIN, CONNECTOR (LIGHT ANGLE)7P			
		< DIODE >			
D601	8-719-058-04	DIODE SEL5223S-TP15 (STAND BY)			
D602	8-719-058-04	DIODE SEL5223S-TP15 (TIMER SELECT)			
D603	8-719-058-64	DIODE SEL5823A-TP15 (V GROOVE)			
D604	8-719-058-64	DIODE SEL5823A-TP15 (DSP)			
D691	8-719-050-84	DIODE RB441Q-40T-72			
D755	8-719-911-19	DIODE 1SS133T-72			
D756	8-719-911-19	DIODE 1SS133T-72			
D761	8-719-911-19	DIODE 1SS133T-72			
D762	8-719-911-19	DIODE 1SS133T-72			
D763	8-719-911-19	DIODE 1SS133T-72			
		< FERRITE BEAD >			
FB701	1-412-473-21	INDUCTOR	0UH		
FB702	1-412-473-21	INDUCTOR	0UH		
		< FILTER >			
FL701	1-517-958-11	INDICATOR TUBE, FLUORESCENT			

PANEL

Ref. No.	Part No.	Description				Remarks
		< IC >				
IC701	8-759-664-40	IC TMP88CS77AF-1A84				
IC702	8-749-011-05	IC GP1U28X				
IC703	8-759-663-65	IC M35501P				
IC704	8-759-083-77	IC BA3830F				
		< TRANSISTOR >				
Q601	8-729-900-80	TRANSISTOR BA1A4M-TP				
Q602	8-729-900-80	TRANSISTOR BA1A4M-TP				
Q603	8-729-900-80	TRANSISTOR BA1A4M-TP				
Q663	8-729-900-80	TRANSISTOR BA1A4M-TP				
Q664	8-729-900-80	TRANSISTOR BA1A4M-TP				
Q665	8-729-900-80	TRANSISTOR BA1A4M-TP				
Q690	8-729-119-78	TRANSISTOR 2SC2785TP-HFE				
Q691	8-729-140-04	TRANSISTOR 2SB1116-TP-LK				
Q692	8-729-140-04	TRANSISTOR 2SB1116-TP-LK				
		< RESISTOR >				
R600	1-249-429-11	CARBON	10K	5%	1/4W	
R601	1-249-410-11	CARBON	270	5%	1/4W	F
R602	1-249-411-11	CARBON	330	5%	1/4W	
R603	1-249-413-11	CARBON	470	5%	1/4W	F
R604	1-249-414-11	CARBON	560	5%	1/4W	F
R605	1-249-415-11	CARBON	680	5%	1/4W	F
R606	1-249-417-11	CARBON	1K	5%	1/4W	F
R607	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R620	1-249-429-11	CARBON	10K	5%	1/4W	
R621	1-249-410-11	CARBON	270	5%	1/4W	F
R622	1-249-411-11	CARBON	330	5%	1/4W	
R623	1-249-413-11	CARBON	470	5%	1/4W	F
R624	1-249-414-11	CARBON	560	5%	1/4W	F
R625	1-249-415-11	CARBON	680	5%	1/4W	F
R626	1-249-417-11	CARBON	1K	5%	1/4W	F
R627	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R640	1-249-429-11	CARBON	10K	5%	1/4W	
R655	1-249-429-11	CARBON	10K	5%	1/4W	
R656	1-249-429-11	CARBON	10K	5%	1/4W	
R671	1-249-414-11	CARBON	560	5%	1/4W	F
R672	1-249-414-11	CARBON	560	5%	1/4W	F
R673	1-249-409-11	CARBON	220	5%	1/4W	F
R674	1-249-409-11	CARBON	220	5%	1/4W	F
R693	1-249-437-11	CARBON	47K	5%	1/4W	
R695	1-249-417-11	CARBON	1K	5%	1/4W	F
R696	1-249-437-11	CARBON	47K	5%	1/4W	
R697	1-249-437-11	CARBON	47K	5%	1/4W	
R698	1-249-417-11	CARBON	1K	5%	1/4W	F
R701	1-247-903-00	CARBON	1M	5%	1/4W	
R702	1-249-401-11	CARBON	47	5%	1/4W	F
R703	1-249-401-11	CARBON	47	5%	1/4W	F
R704	1-249-429-11	CARBON	10K	5%	1/4W	
R705	1-249-429-11	CARBON	10K	5%	1/4W	
R706	1-249-429-11	CARBON	10K	5%	1/4W	
R707	1-249-429-11	CARBON	10K	5%	1/4W	
R708	1-249-429-11	CARBON	10K	5%	1/4W	
R709	1-249-429-11	CARBON	10K	5%	1/4W	
R710	1-249-429-11	CARBON	10K	5%	1/4W	
R711	1-247-807-31	CARBON	100	5%	1/4W	
R712	1-247-807-31	CARBON	100	5%	1/4W	

Ref. No.	Part No.	Description			Remarks
R713	1-249-441-11	CARBON	100K	5%	1/4W
R714	1-249-441-11	CARBON	100K	5%	1/4W
R715	1-249-441-11	CARBON	100K	5%	1/4W
R716	1-249-441-11	CARBON	100K	5%	1/4W
R717	1-249-441-11	CARBON	100K	5%	1/4W
R718	1-249-441-11	CARBON	100K	5%	1/4W
R719	1-249-441-11	CARBON	100K	5%	1/4W
R720	1-249-441-11	CARBON	100K	5%	1/4W
R721	1-249-441-11	CARBON	100K	5%	1/4W
R722	1-249-441-11	CARBON	100K	5%	1/4W
R723	1-249-441-11	CARBON	100K	5%	1/4W
R724	1-249-441-11	CARBON	100K	5%	1/4W
R725	1-249-441-11	CARBON	100K	5%	1/4W
R726	1-249-441-11	CARBON	100K	5%	1/4W
R727	1-249-441-11	CARBON	100K	5%	1/4W
R728	1-249-441-11	CARBON	100K	5%	1/4W
R729	1-249-441-11	CARBON	100K	5%	1/4W
R730	1-249-441-11	CARBON	100K	5%	1/4W
R731	1-249-441-11	CARBON	100K	5%	1/4W
R732	1-249-441-11	CARBON	100K	5%	1/4W
R733	1-249-441-11	CARBON	100K	5%	1/4W
R734	1-249-429-11	CARBON	10K	5%	1/4W
R737	1-247-807-31	CARBON	100	5%	1/4W
R750	1-249-429-11	CARBON	10K	5%	1/4W
R755	1-249-417-11	CARBON	1K	5%	1/4W F
R757	1-247-807-31	CARBON	100	5%	1/4W
R758	1-247-807-31	CARBON	100	5%	1/4W
R759	1-247-807-31	CARBON	100	5%	1/4W
R762	1-249-435-11	CARBON	33K	5%	1/4W
R763	1-247-895-00	CARBON	470K	5%	1/4W
R764	1-247-893-11	CARBON	390K	5%	1/4W
R765	1-247-893-11	CARBON	390K	5%	1/4W
R766	1-249-441-11	CARBON	100K	5%	1/4W
R767	1-249-441-11	CARBON	100K	5%	1/4W
R768	1-249-429-11	CARBON	10K	5%	1/4W (EA,MY,SP,KR,TH)
R769	1-249-440-11	CARBON	82K	5%	1/4W (EA,MY,SP,KR,TH)
R770	1-249-417-11	CARBON	1K	5%	1/4W F (EA,MY,SP,KR,TH)
R771	1-249-433-11	CARBON	22K	5%	1/4W
R773	1-249-436-11	CARBON	39K	5%	1/4W
R774	1-249-420-11	CARBON	1.8K	5%	1/4W F
R801	1-249-437-11	CARBON	47K	5%	1/4W
R802	1-249-437-11	CARBON	47K	5%	1/4W
R803	1-249-437-11	CARBON	47K	5%	1/4W
R804	1-249-437-11	CARBON	47K	5%	1/4W
R805	1-249-437-11	CARBON	47K	5%	1/4W
R806	1-249-437-11	CARBON	47K	5%	1/4W
R807	1-249-437-11	CARBON	47K	5%	1/4W
R808	1-249-437-11	CARBON	47K	5%	1/4W
R809	1-249-437-11	CARBON	47K	5%	1/4W
R810	1-249-437-11	CARBON	47K	5%	1/4W
R811	1-249-437-11	CARBON	47K	5%	1/4W
R812	1-249-437-11	CARBON	47K	5%	1/4W
R813	1-249-437-11	CARBON	47K	5%	1/4W
R814	1-249-437-11	CARBON	47K	5%	1/4W
R815	1-249-437-11	CARBON	47K	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R816	1-249-437-11	CARBON	47K	5%	1/4W
R817	1-249-437-11	CARBON	47K	5%	1/4W
		< SWITCH >			
S601	1-762-875-21	SWITCH, KEYBOARD (POWER)			
S602	1-762-875-21	SWITCH, KEYBOARD (DIP)			
S603	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)			
S622	1-762-875-21	SWITCH, KEYBOARD (DSP)			
S623	1-762-875-21	SWITCH, KEYBOARD (V GROOVE)			
S624	1-762-875-21	SWITCH, KEYBOARD (MODE SELECT)			
		< VIBRATOR >			
X701	1-781-312-11	VIBRATOR, CERAMIC 12.5MHz			
**********					
	1-671-504-11	SENSOR BOARD			
		**********			
		< CONNECTOR >			
CN708	1-506-481-11	PIN, CONNECTOR 2P			
		< DIODE >			
D704	8-719-055-84	DIODE GL528VS1			
		< RESISTOR >			
R711	1-249-415-11	CARBON	680	5%	1/4W F
**********					
	1-671-789-11	SENSOR2 BOARD			
		**********			
	4-964-461-02	HOLDER(SENSOR)			
		< TRANSISTOR >			
Q703	8-729-926-31	PHOTO TRAN ISTOR PT483F1			
**********					
	A-4428-628-A	SUB PANEL BOARD, COMPLETE (EXCEPT TH)			
		**********			
	A-4473-239-A	SUB PANEL BOARD, COMPLETE (TH)			
		**********			
		< CAPACITOR >			
C771	1-162-306-11	CERAMIC	0.01uF	30.00% 16V	
C772	1-162-306-11	CERAMIC	0.01uF	30.00% 16V	
		< DIODE >			
D605	8-719-058-64	DIODE SEL5823A-TP15 (SET UP)			
D606	8-719-058-64	DIODE SEL5823A-TP15 (SOUND)			
D607	8-719-058-64	DIODE SEL5823A-TP15 (PROLOGIC)			
D608	8-719-058-64	DIODE SEL5823A-TP15 (DVD 5.1CH)			
D609	8-719-058-03	DIODE SEL5423E-TP15 (B FWD)			
D610	8-719-058-03	DIODE SEL5423E-TP15 (B REV)			
D611	8-719-058-03	DIODE SEL5423E-TP15 (A FWD)			
D612	8-719-058-03	DIODE SEL5423E-TP15 (A REV)			
D613	8-719-058-04	DIODE SEL5223S-TP15 (REC)			
D617	8-719-058-64	DIODE SEL5823A-TP15 (GROOVE EX)			

Ref. No.	Part No.	Description			Remarks
D618	8-719-058-64	DIODE SEL5823A-TP15 (GROOVE)			
D652	8-719-056-13	DIODE SML79423C-TP15			
		< EARTH >			
* EPT701	1-537-738-21	TERMINAL, EARTH			
		< TRANSISTOR >			
Q605	8-729-900-80	TRANSISTOR BA1A4M-TP			
Q607	8-729-900-80	TRANSISTOR BA1A4M-TP			
Q609	8-729-900-80	TRANSISTOR BA1A4M-TP			
Q611	8-729-900-80	TRANSISTOR BA1A4M-TP			
Q613	8-729-900-80	TRANSISTOR BA1A4M-TP			
Q617	8-729-900-80	TRANSISTOR BA1A4M-TP			
Q652	8-729-900-80	TRANSISTOR BA1A4M-TP			
		< RESISTOR >			
R608	1-249-420-11	CARBON	1.8K	5%	1/4W F
R609	1-249-422-11	CARBON	2.7K	5%	1/4W F
R610	1-247-843-11	CARBON	3.3K	5%	1/4W
R611	1-249-425-11	CARBON	4.7K	5%	1/4W F
R612	1-249-427-11	CARBON	6.8K	5%	1/4W F
R613	1-249-429-11	CARBON	10K	5%	1/4W
R614	1-249-431-11	CARBON	15K	5%	1/4W
R615	1-249-434-11	CARBON	27K	5%	1/4W
R641	1-249-410-11	CARBON	270	5%	1/4W F
R642	1-249-411-11	CARBON	330	5%	1/4W
R643	1-249-413-11	CARBON	470	5%	1/4W F
R644	1-249-414-11	CARBON	560	5%	1/4W F
R645	1-249-415-11	CARBON	680	5%	1/4W F
R646	1-249-417-11	CARBON	1K	5%	1/4W F
R647	1-249-418-11	CARBON	1.2K	5%	1/4W F
R648	1-249-420-11	CARBON	1.8K	5%	1/4W F
R649	1-249-422-11	CARBON	2.7K	5%	1/4W F
R650	1-247-843-11	CARBON	3.3K	5%	1/4W
R651	1-249-425-11	CARBON	4.7K	5%	1/4W F
R652	1-249-427-11	CARBON	6.8K	5%	1/4W F
R675	1-249-409-11	CARBON	220	5%	1/4W F
R676	1-249-409-11	CARBON	220	5%	1/4W F
R677	1-249-409-11	CARBON	220	5%	1/4W F
R678	1-249-409-11	CARBON	220	5%	1/4W F
R679	1-249-409-11	CARBON	220	5%	1/4W F
R680	1-249-409-11	CARBON	220	5%	1/4W F
R681	1-249-409-11	CARBON	220	5%	1/4W F
R682	1-249-409-11	CARBON	220	5%	1/4W F
R683	1-249-409-11	CARBON	220	5%	1/4W F
R687	1-249-409-11	CARBON	220	5%	1/4W F
R688	1-249-409-11	CARBON	220	5%	1/4W F
R691	1-249-409-11	CARBON	220	5%	1/4W F
R692	1-249-409-11	CARBON	220	5%	1/4W F
R752	1-249-401-11	CARBON	47	5%	1/4W F
R753	1-247-807-31	CARBON	100	5%	1/4W
R754	1-247-807-31	CARBON	100	5%	1/4W

SUB PANEL | SUB TRANS | SURR AMP

Ref. No.	Part No.	Description			Remarks
		< SWITCH >			
S607	1-762-875-21	SWITCH, KEYBOARD (HI DUB)			
S608	1-762-875-21	SWITCH, KEYBOARD (REC PAUSE)			
S609	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)			
S611	1-762-875-21	SWITCH, KEYBOARD (PRO LOG)			
S612	1-762-875-21	SWITCH, KEYBOARD (DVD 5.1CH)			
S613	1-762-875-21	SWITCH, KEYBOARD (GROOVE EX)			
S614	1-762-875-21	SWITCH, KEYBOARD (GROOVE)			
S641	1-762-875-21	SWITCH, KEYBOARD (A REV)			
S642	1-762-875-21	SWITCH, KEYBOARD (A FWD)			
S643	1-762-875-21	SWITCH, KEYBOARD (B REV)			
S644	1-762-875-21	SWITCH, KEYBOARD (B FWD)			
S645	1-762-875-21	SWITCH, KEYBOARD (STOP)			
S646	1-762-875-21	SWITCH, KEYBOARD (CD PLAY)			
S647	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)			
S649	1-762-875-21	SWITCH, KEYBOARD (FF)			
S650	1-762-875-21	SWITCH, KEYBOARD (REW)			
S651	1-762-875-21	SWITCH, KEYBOARD (AMS+)			
S652	1-762-875-21	SWITCH, KEYBOARD (AMS-)			
S701	1-772-502-11	CONTROLLER, JOY STICK			(STICK CONTROLER)
S751	1-473-392-11	ENCODER, ROTARY (VOLUME)			
**********					
	1-676-976-11	SUB TRANS BOARD (CND,AEP,UK,G,AED,CIS)			
		**********			
		< CAPACITOR >			
⚠C901	1-113-925-11	CERAMIC	0.01uF	20.00% 250V	
C902	1-126-768-11	ELECT	2200uF	20.00% 16V	
C903	1-126-933-11	ELECT	100uF	20.00% 16V	
		< CONNECTOR >			
CN901	1-564-321-00	PIN, CONNECTOR 2P			
* CN902	1-564-321-21	PIN, CONNECTOR 2P			
CN903	1-785-330-11	PIN, CONNECTOR (LIGHT ANGLE)4P			
		< DIODE >			
D901	8-719-024-99	DIODE 11ES2-NTA2B			
D902	8-719-024-99	DIODE 11ES2-NTA2B			
D903	8-719-024-99	DIODE 11ES2-NTA2B			
D904	8-719-024-99	DIODE 11ES2-NTA2B			
⚠D906	8-719-911-19	DIODE 1SS133T-72			
		< IC >			
IC901	8-759-158-62	IC TA78057S			
		< RESISTOR >			
R901	1-249-429-11	CARBON	10K	5% 1/4W	
R902	1-249-441-11	CARBON	100K	5% 1/4W	
		< RELAY >			
⚠RY901	1-755-276-11	RELAY, POWER			
		< TRANSFORMER >			
⚠T901	1-435-210-11	TRANSFORMER, POWER (AEP,UK,G,AED,CIS)			
⚠T901	1-435-209-11	TRANSFORMER, POWER (CND)			
**********					

Ref. No.	Part No.	Description			Remarks
	A-4428-622-A	SURR AMP BOARD, COMPLETE (CND)			
		**********			
	A-4428-643-A	SURR AMP BOARD, COMPLETE			(E,EA,MY,SP,KR,MX,AR,AUS)
		**********			
	A-4428-632-A	SURR AMP BOARD, COMPLETE			(AEP,UK,G,AED,CIS)
		**********			
	A-4473-251-A	SURR AMP BOARD, COMPLETE (TH)			
		**********			
		< CAPACITOR >			
C1001	1-126-963-11	ELECT	4.7uF	20.00% 50V	(EXCEPT CND)
C1001	1-128-581-11	ELECT	4.7uF	20.00% 100V	(CND)
C1002	1-162-286-31	CERAMIC	220PF	10% 50V	
C1003	1-162-282-31	CERAMIC	100PF	10% 50V	
C1004	1-104-664-11	ELECT	47uF	20.00% 10V	
C1006	1-136-495-11	MYLAR	0.068uF	5.00% 50V	
C1007	1-136-495-11	MYLAR	0.068uF	5.00% 50V	
C1033	1-126-968-11	ELECT	100uF	20.00% 50V	
C1034	1-126-968-11	ELECT	100uF	20.00% 50V	
C1035	1-162-306-11	CERAMIC	0.01uF	30.00% 16V	
C1036	1-162-306-11	CERAMIC	0.01uF	30.00% 16V	
C1051	1-128-581-11	ELECT	4.7uF	20.00% 100V	(CND)
C1051	1-126-963-11	ELECT	4.7uF	20.00% 50V	(EXCEPT CND)
C1052	1-162-286-31	CERAMIC	220PF	10% 50V	
C1053	1-162-282-31	CERAMIC	100PF	10% 50V	
C1054	1-104-664-11	ELECT	47uF	20.00% 10V	
C1056	1-136-495-11	MYLAR	0.068uF	5.00% 50V	
C1057	1-136-495-11	MYLAR	0.068uF	5.00% 50V	
C1081	1-128-581-11	ELECT	4.7uF	20.00% 100V	(CND)
C1081	1-126-963-11	ELECT	4.7uF	20.00% 50V	(EXCEPT CND)
C1082	1-162-286-31	CERAMIC	220PF	10% 50V	
C1083	1-162-282-31	CERAMIC	100PF	10% 50V	
C1084	1-104-664-11	ELECT	47uF	20.00% 10V	
C1086	1-136-495-11	MYLAR	0.068uF	5.00% 50V	
C1087	1-136-495-11	MYLAR	0.068uF	5.00% 50V	
		< CONNECTOR >			
CN1001	1-691-767-11	PLUG (MICRO CONNECTOR) 5P			
* CN1002	1-691-774-11	PLUG (MICRO CONNECTOR) 12P			
		< DIODE >			
D1001	8-719-911-19	DIODE 1SS133T-72			
D1002	8-719-911-19	DIODE 1SS133T-72			
D1051	8-719-911-19	DIODE 1SS133T-72			
D1061	8-719-911-19	DIODE 1SS133T-72			
D1062	8-719-911-19	DIODE 1SS133T-72			
D1081	8-719-911-19	DIODE 1SS133T-72			
		< IC >			
IC1001	8-749-017-19	IC STK443-050			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description				Remarks
		< TRANSISTOR >				
Q1001	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
Q1041	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			(AEP,UK,G,AED,CIS)
Q1051	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
Q1061	8-729-140-82	TRANSISTOR	2SA988TP-PAFAEA			
Q1062	8-729-140-82	TRANSISTOR	2SA988TP-PAFAEA			
Q1063	8-729-900-36	TRANSISTOR	BA1F4M-TP			
Q1064	8-729-900-36	TRANSISTOR	BA1F4M-TP			
Q1081	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
Q1091	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
Q1092	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			
		< RESISTOR >				
R1001	1-249-417-11	CARBON	1K	5%	1/4W	F
R1002	1-249-438-11	CARBON	56K	5%	1/4W	
R1003	1-249-414-11	CARBON	560	5%	1/4W	F
R1004	1-249-438-11	CARBON	56K	5%	1/4W	
⚠R1005	1-233-352-11	ENCAPSULATED COMPONENT				
R1006	1-249-417-11	CARBON	1K	5%	1/4W	F
R1007	1-249-431-11	CARBON	15K	5%	1/4W	
R1008	1-249-441-11	CARBON	100K	5%	1/4W	
R1009	1-260-076-11	CARBON	10	5%	1/2W	
R1010	1-249-437-11	CARBON	47K	5%	1/4W	
⚠R1031	1-212-881-11	FUSIBLE	100	5%	1/4W	
⚠R1032	1-212-881-11	FUSIBLE	100	5%	1/4W	
⚠R1033	1-202-972-61	FUSIBLE	1	5%	1/4W	
R1047	1-249-429-11	CARBON	10K	5%	1/4W	
R1051	1-249-417-11	CARBON	1K	5%	1/4W	F
R1052	1-249-438-11	CARBON	56K	5%	1/4W	
R1053	1-249-414-11	CARBON	560	5%	1/4W	F
R1054	1-249-438-11	CARBON	56K	5%	1/4W	
⚠R1055	1-233-352-11	ENCAPSULATED COMPONENT				
R1056	1-249-417-11	CARBON	1K	5%	1/4W	F
R1057	1-249-431-11	CARBON	15K	5%	1/4W	
R1058	1-249-441-11	CARBON	100K	5%	1/4W	
R1059	1-260-076-11	CARBON	10	5%	1/2W	
R1060	1-249-438-11	CARBON	56K	5%	1/4W	
⚠R1061	1-215-889-00	METAL OXIDE	330	5%	2W	
⚠R1062	1-215-889-00	METAL OXIDE	330	5%	2W	
R1063	1-249-429-11	CARBON	10K	5%	1/4W	
R1064	1-249-429-11	CARBON	10K	5%	1/4W	
R1065	1-249-437-11	CARBON	47K	5%	1/4W	
R1066	1-249-437-11	CARBON	47K	5%	1/4W	
R1081	1-249-417-11	CARBON	1K	5%	1/4W	F
R1082	1-249-438-11	CARBON	56K	5%	1/4W	
R1083	1-249-414-11	CARBON	560	5%	1/4W	F
R1084	1-249-438-11	CARBON	56K	5%	1/4W	
⚠R1085	1-233-352-11	ENCAPSULATED COMPONENT				
R1086	1-249-417-11	CARBON	1K	5%	1/4W	F
R1087	1-249-431-11	CARBON	15K	5%	1/4W	
R1088	1-249-441-11	CARBON	100K	5%	1/4W	
R1089	1-260-076-11	CARBON	10	5%	1/2W	
R1090	1-249-439-11	CARBON	68K	5%	1/4W	
R1091	1-249-441-11	CARBON	100K	5%	1/4W	
R1092	1-249-441-11	CARBON	100K	5%	1/4W	
R1093	1-249-439-11	CARBON	68K	5%	1/4W	

Ref. No.	Part No.	Description				Remarks
R1094	1-249-433-11	CARBON	22K	5%	1/4W	
		< RELAY >				
RY1061	1-515-920-11	RELAY (24V)				
RY1062	1-515-920-11	RELAY (24V)				
		< THERMISTOR(POSITIVE) >				
THP091	1-807-796-11	THERMISTOR				
**********						
	1-676-975-11	TRANS BOARD				
		**********				
	1-533-293-11	FUSE HOLDER				
		< CONNECTOR >				
CN911	1-564-321-00	PIN, CONNECTOR 2P				(E,EA,MY,SP,KR,MX,AR,AUS,TH)
* CN913	1-564-522-11	PLUG, CONNECTOR 7P				
* CN914	1-564-517-11	PLUG, CONNECTOR 2P				
		< FUSE >				
⚠F911	1-532-505-31	FUSE	5A/250V(E,EA,MY,SP,AR,MX,CND)			
⚠F912	1-532-464-31	FUSE	2.5A/250V(TH,KR)			
⚠F913	1-532-464-31	FUSE	2.5A/250V(E,EA,MY,SP,AR,AUS)			
⚠F914	1-533-312-11	FUSE, GLASS CYLINDRICAL(DIA.5) 10A/125V				(CND)
⚠F914	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG) 8A/250V				(AEP,UK,G,AED,CIS)
⚠F915	1-533-312-11	FUSE, GLASS CYLINDRICAL(DIA.5) 10A/125V				(CND)
⚠F915	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG) 8A/250V				(AEP,UK,G,AED,CIS)
⚠F916	1-533-312-11	FUSE, GLASS CYLINDRICAL(DIA.5) 10A/125V				(CND)
⚠F916	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG) 8A/250V				(EXCEPT CND)
⚠F917	1-533-312-11	FUSE, GLASS CYLINDRICAL(DIA.5) 10A/125V				(CND)
⚠F917	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG) 8A 250V				(EXCEPT CND)
		< RESISTOR >				
⚠R911	1-219-120-11	FUSIBLE	0.15	5%	1/4W	
⚠R912	1-219-120-11	FUSIBLE	0.15	5%	1/4W	
⚠R913	1-219-119-81	FUSIBLE	0.1	5%	1/4W	
⚠R916	1-202-725-00	SOLID	3.3M	10%	1/2W	(CND)
⚠R917	1-219-123-11	FUSIBLE	0.47	5%	1/4W	
		< SWITCH >				
⚠S911	1-771-291-11	SWITCH, POWER (VOLTAGE SELECT)				(E,EA,MY,SP,AR)
**********						

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remarks
		MISCELLANEOUS	
		**********	
3	1-769-980-11	WIRE(FLAT TYPE) (13 CORE) (CND,E,EA,MY,SP,KR,TH,MX,AR,AUS)	
3	1-773-013-11	WIRE(FLAT TYPE) (15 CORE)(190mm) (AEP,UK,G,AED,CIS)	
4	1-693-481-11	TUNER(FM/AM) (CND)	
4	1-693-484-11	TUNER(FM/AM) (E,MX,AR)	
4	1-693-486-11	TUNER(FM/AM) (CND)	
4	1-693-488-11	TUNER(FM/AM) (EA,MY,SP,KR,AUS)	
4	1-693-490-11	TUNER(FM/AM) (AEP,UK,G,AED,CIS)	
69	1-769-938-11	WIRE(FLAT TYPE) (11 CORE)	
71	1-773-022-11	WIRE(FLAT TYPE) (15 CORE)(300mm)	
72	1-773-045-11	WIRE(FLAT TYPE) (17 CORE)(170mm)	
102	1-773-041-11	WIRE (FLAT TYPE) (17 CORE)(130mm)	
103	1-792-794-11	WIRE (FLAT TYPE) (19 CORE)	
⚠110	1-690-608-11	CORD, POWER (AUS)	
⚠110	1-690-609-21	CORD, POWER (CND,E,MX,TH)	
⚠110	1-769-079-21	CORD, POWER (KR)	
⚠110	1-777-071-51	CORD, POWER (AEP,UK,G,AED,CIS,EA,MY,SP)	
⚠110	1-783-941-21	CORD, POWER (AR)	
111	1-569-008-21	ADAPTOR, CONVERSION 2P (EA,MY,SP)	
112	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	
⚠240	8-820-116-01	OPICAL PICK-UP BLOCK KSM-213DAP	
243	1-792-024-11	WIRE (FLAT TYPE) (16 CORE)	
FAN101	1-763-072-11	FAN, D.C.	
S707	1-418-045-01	ENCODER, ROTARY (DISC TRAY ADDRES DETECT)	
⚠T902	1-435-390-11	TRANSFORMER, POWER (CND)	
⚠T902	1-435-391-11	TRANSFORMER, POWER (AEP,UK,G,AED,CIS)	
⚠T902	1-435-392-11	TRANSFORMER, POWER (E,EA,MY,SP,KR,TH,MX,AR,AUS)	

****

Ref. No.	Part No.	Description	Remarks
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-871-01	SCREW +BVTT 3X6 (S)	
#2	7-685-146-11	SCREW +P3X8 TYPE2 NON-SLIT	
#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#4	7-685-872-09	SCREW +BVTT 3X8 (S)	
#5	7-685-650-79	SCREW +BVTP 3X16 TYPE2 N-S	
#6	7-685-880-09	SCREW +BVTT 4X6 (S)	
#11	7-685-851-04	SCREW +BVTT 2X4 (S)	
#12	7-628-254-15	SCREW +PS 2.6X6	
#13	7-628-254-50	SCREW +PS 2.6X16	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SS-CT170/RC170/ RS170/RS170P

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Chinese Model

Photo: SS-CT170

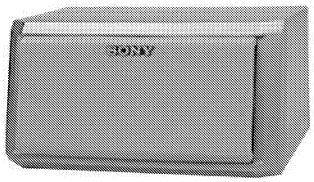


Photo: SS-RS170P

- SS-CT170/RC170/RS170P are the speaker system in MHC-VZ30AV/ZD70DVD/ZX30AV.
- SS-RS170 is the speaker sysytem in MHC-VZ10.

- The SS-RC170 system consists of one unit of SS-CT170 and two units of SS-RS170P.

SPECIFICATIONS

Rear Speaker (SS-RS170/RS170P):

Speaker system	1-way, 1-unit, bass-reflex type
Speaker units	
Full-range:	8 cm, cone type
Nominal impedance	8 Ω (RS170P) 16 Ω (RS170)
Dimensions (w/h/d)	Approx. 195 × 105 × 135 mm
Mass	Approx. 1.0 kg net per speaker

Center Speaker (SS-CT170):

Speaker system	1-way, 1-unit, bass-reflex type, magnetically shielded
Speaker units	
Full-range:	8 cm, cone type
Nominal impedance	8 Ω
Dimensions (w/h/d)	Approx. 220 × 105 × 135 mm
Mass	Approx. 1.1 kg net

Design and specifications are subject to change without notice.

SPEAKER SYSTEM

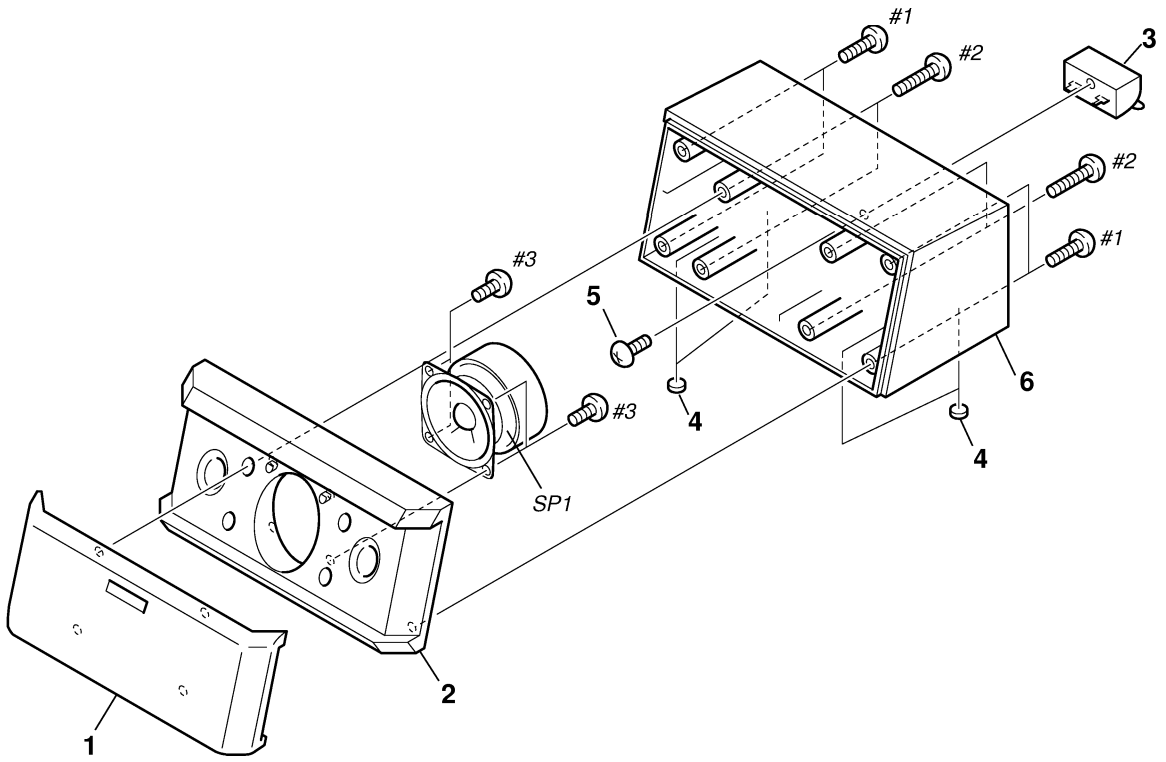
SONY®

EXPLODED VIEW AND PARTS LIST

NOTE:

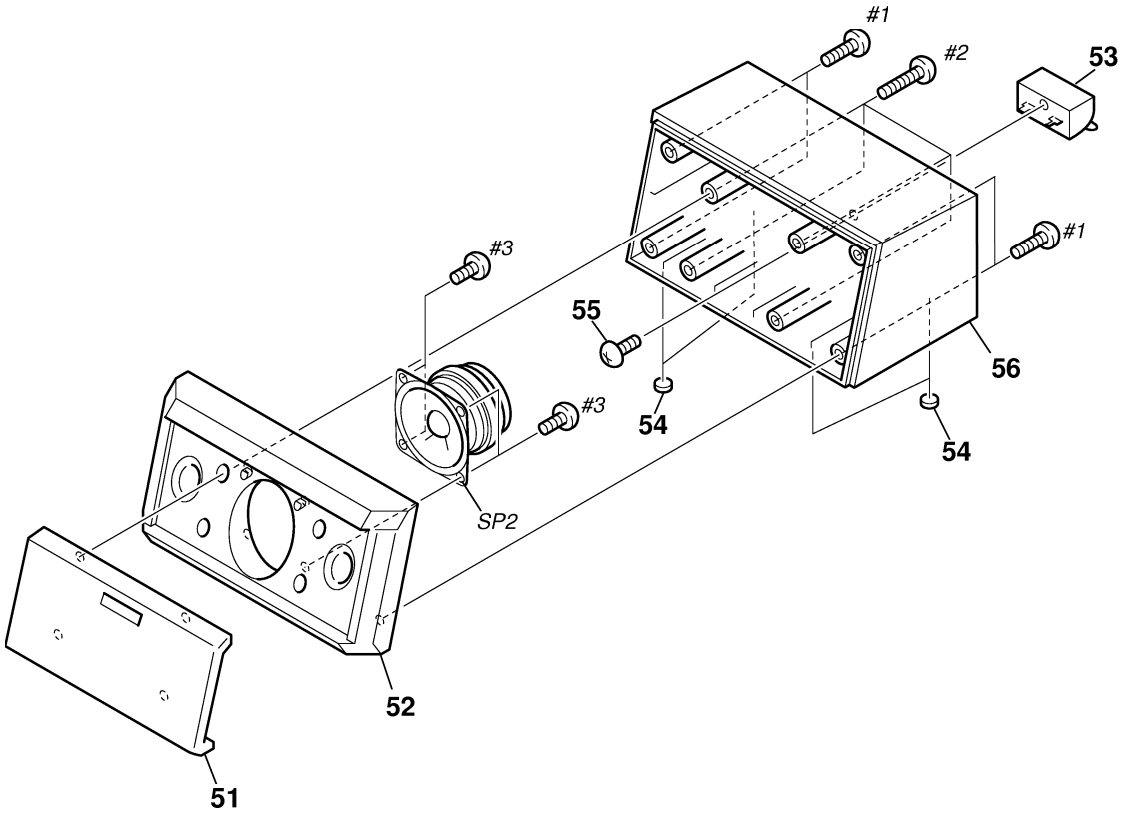
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

(1) SS-CT170



Ref. No.	Part No.	Description	Remarks
1	X-4952-724-2	FRAME(CN) ASSY, GRILLE	
2	4-227-264-01	PANEL(CN), FRONT	
3	1-537-775-12	TERMINAL BOARD	
4	4-982-339-21	FOOT	
5	4-224-542-01	SCREW(4X14)	
6	4-227-265-02	CABINET (CN)	
SP1	1-529-623-11	SPEAKER (8cm)	
#1	7-685-663-79	SCREW +P4X16 TYPE2 NON-SLIT	
#2	7-685-165-11	SCREW +P4X25 TYPE2 NON-SLIT	
#3	7-685-661-79	SCREW +P4X12 TYPE2 NON-SLIT	

(2) SS-RS170/RS170P



Ref. No.	Part No.	Description	Remarks
51	X-4952-725-1	FRAME (SR) ASSY, GRILLE (RS170)	
51	X-4952-725-3	FRAME (SR) ASSY, GRILLE (RS170P)	
52	4-227-259-01	PANEL (SR), FRONT	
53	1-537-775-12	TERMINAL BOARD	
54	4-982-339-11	FOOT (RS170)	
54	4-982-339-21	FOOT (RS170P)	
55	4-224-542-01	SCREW (4X14)	

Ref. No.	Part No.	Description	Remarks
56	X-4952-731-2	CABINET (SR) ASSY	
SP2	1-529-624-11	SPEAKER (8cm)(RS170P)	
SP2	1-529-625-11	SPEAKER (8cm)(RS170)	
#1	7-685-663-79	SCREW +P 4X16 TYPE2 NON-SLIT	
#2	7-685-665-79	SCREW +P 4X25 TYPE2 NON-SLIT (RS170)	
#2	7-685-165-11	SCREW +P 4X25 TYPE2 NON-SLIT (RS170P)	
#3	7-685-661-79	SCREW +P 4X12 TYPE2 NON-SLIT	

SS-VZ50MD/ZX10/ZX30AV/ ZX50MD/ZX70DVD

SERVICE MANUAL

US Model
SS-ZX10/ZX50MD/ZX70DVD

Canadian Model
SS-ZX10/ZX30AV/ZX70DVD

AEP Model
UK Model
SS-ZX10/ZX30AV/ZX50MD/ZX70DVD

E Model
SS-VZ50MD/ZX50MD

Australian Model
SS-ZX30AV/ZX50MD

Tourist Model
SS-VZ50MD

This set is the speaker system in MHC-ZX10/ZX30AV/ZX70DVD, DHC-VZ50MD/ZX50MD.

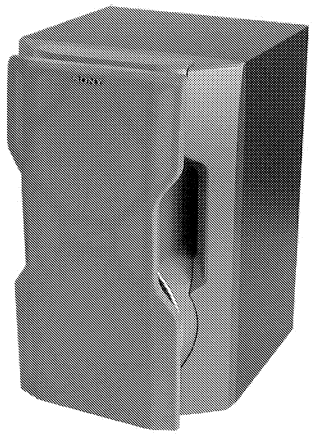


Photo: SS-ZX10

SPECIFICATIONS

Speaker system	3-way, bass-reflex type, magnetically shielded type
Speaker units	
Woofer:	17 cm, cone type
Tweeter:	5 cm, cone type
Super Tweeter:	4 cm, cone type
Nominal impedance	8 ohms
Dimensions (w/h/d)	Approx. 250 x 375 x 285 mm
Mass	Approx. 5.5 kg net per speaker

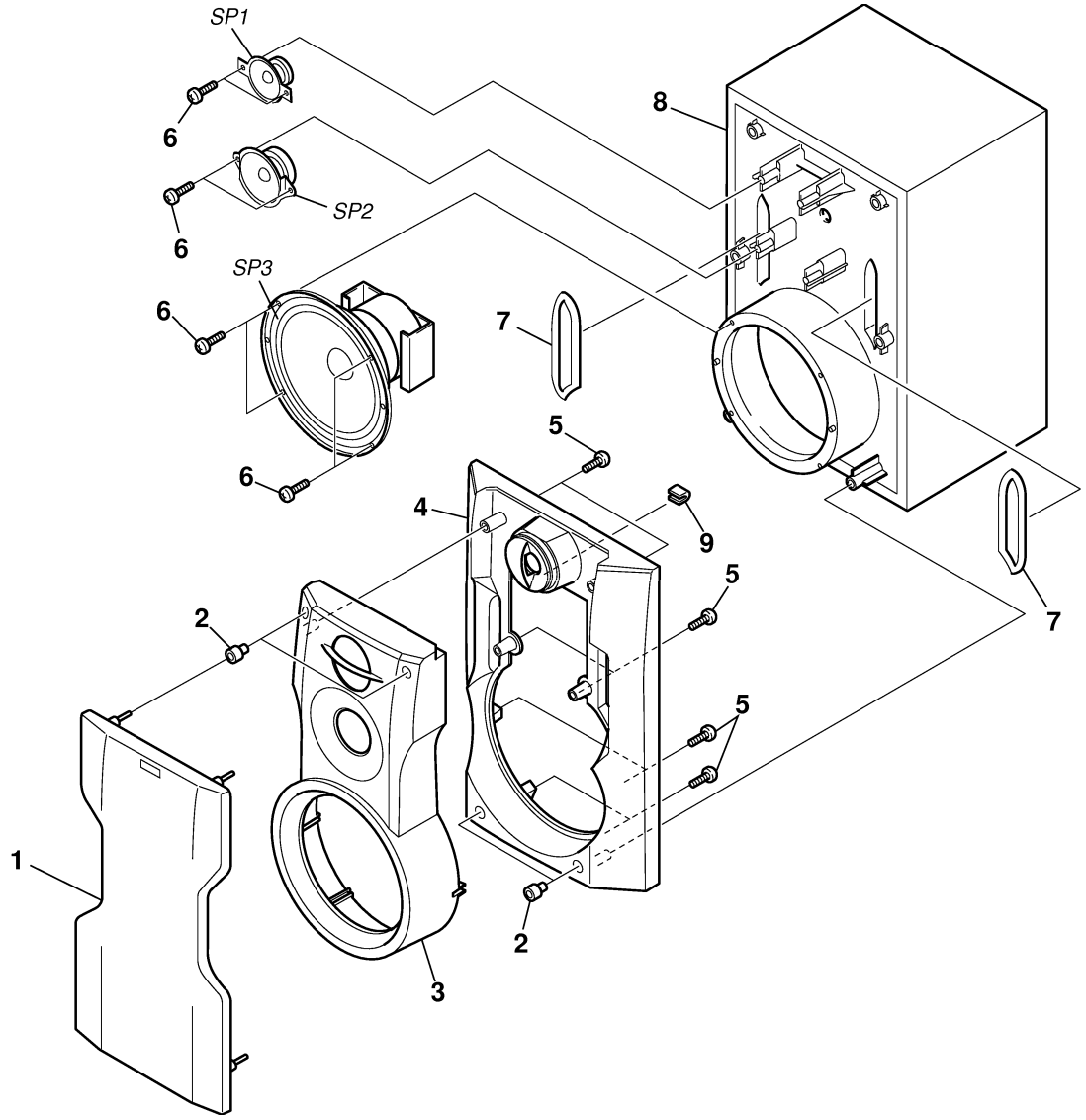
SPEAKER SYSTEM

SONY®

EXPLODED VIEW AND PARTS LIST

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Abbreviation
  G : German model
  AED : North European model



Ref. No.	Part No.	Description	Remark
1	A-4412-073-A	FRAME ASSY, GRILLE	
2	4-963-075-01	CATCH	
3	4-227-595-01	PANEL, ORNAMENTAL	
4	4-227-594-01	PANEL, FRONT	
5	7-685-162-01	SCREW +B 4X14, TAPPING	
6	4-874-614-01	SCREW (4) (3.5X14), TAPPING	
7	4-227-663-01	PACKING	
8	A-4412-154-A	CABINET ASSY, SPEAKER	
9	4-229-552-01	PACKING (TW)	
SP1	1-529-663-11	SPEAKER (4cm)	
SP2	1-529-665-11	SPEAKER (5cm)	
SP3	1-529-664-11	SPEAKER (ZX10,ZX50MD)	
SP3	1-529-668-11	SPEAKER (VZ50MD,ZX30AV,ZX70DVD)	

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ACCESSORIES & PACKING MATERIALS

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	1-558-848-11	CORD, SPEAKER	

Sony Corporation
Audio Entertainment Group

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